

MICHIGAN HAY AND GRAIN DEALERS' CONVENTION

THE AMERICAN ELEVATOR AND GRAIN TRADE

Entered as second-class matter June 26, 1885, at the Post Office at Chicago, Illinois, under Act of March 3rd, 1879.

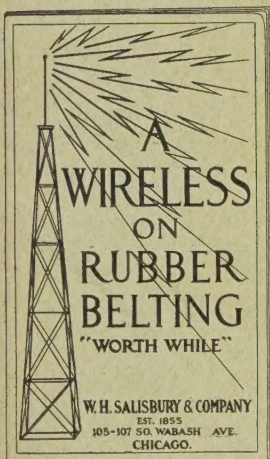
A MONTHLY JOURNAL DEVOTED TO THE ELEVATOR AND GRAIN INTERESTS.

PUBLISHED BY
Mitchell Brothers Publishing Co.

Vol. XXXII.

CHICAGO, ILLINOIS, AUGUST 15, 1913.

No. 2. } One Dollar Per Annum.
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THIS BOOKLET will show you the way to **Absolute Rubber Belt Satisfaction**

If interested, send for it! It's Free
W. H. SALISBURY & CO., Inc.
Manufacturers or Distributors
High Grade Leather and Rubber Belting, Hose, Packings, Etc.
RUBBER GOODS OF EVERY DESCRIPTION
Since 1855 CHICAGO, ILL.



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Be sure it's the
"MOHAWK"
brand of rubber
belting.
Order of your build-
ing contractor or
dealer or write us
direct.

Consign your Grain and Field Seeds to

Somers, Jones & Co.

82 Board of Trade, CHICAGO

VAN LEUNEN SERVICE — TRY IT —

YOUR **PAUL VAN LEUNEN** SUCCESS
AND COMPANY
GINGINNATI.O. DECATUR, ILL.
Give Us Your Business

The Climax Scoop Truck

Is a scoop on wheels carrying 2½ bushels of grain and 200 lbs of coal. With it a boy can do more than five men with hand scoops.

Saves time and labor which are money.

Saves fretting and sweating and demurrage bills.

Saves its cost in wear of other scoops.

Be "up-to-date" and ORDER NOW.

Price \$10.00
At Factory.

**Detroit
Scoop-Truck Company**
2227 W. Jefferson Ave. DETROIT, MICH.



Moline Upright Oat Clipper

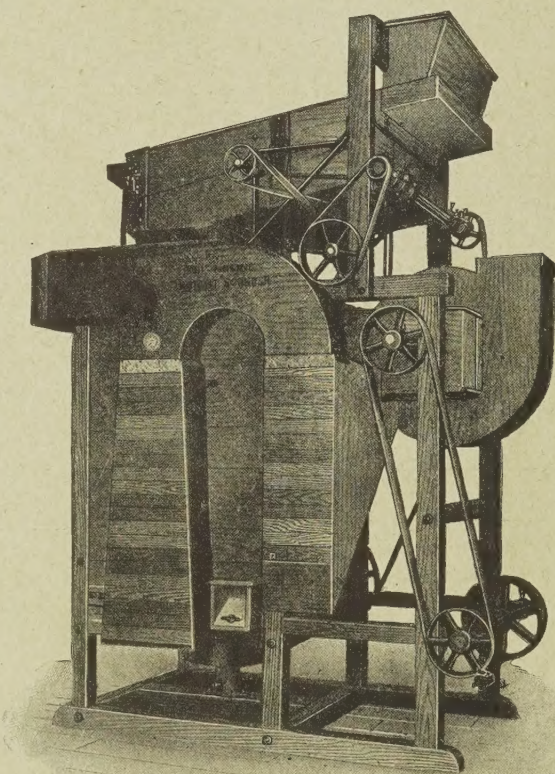
Saves from 40% to 60% of the power required by horizontal machines.

It saves its first cost in a short time and is a money maker all the time.

Unlike other clippers, it clips the ends of the berry the hardest.

**A
Power
Saver**

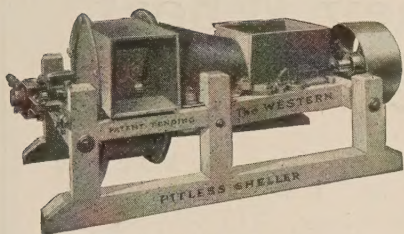
**A
Money
Maker**



Because of its by-pass spout it is not only a clipper, but can be used as a receiving separator.

Give it a trial.

BARNARD & LEAS MFG. CO.
MILL BUILDERS AND
MILL FURNISHERS
ESTABLISHED 1860. MOLINE, ILLINOIS, U.S.A.



"Western" Pitless Sheller

WESTERN

Grain Cleaning and Grain Handling Machinery

are the

Life of your Elevator

It is the knowledge of the requirements for thorough cleaning of grain incorporated in Western machinery that gives them the *reliability, durability, simplicity* and *capacity* so essential in elevator machinery and ultimate success.

Western machinery is the life of your elevator. Only men of long, successful experience and deep knowledge who *know* grain and can demonstrate their knowledge of mechanics can design and construct machines for handling and cleaning grain so as to secure *simplicity, reliability, and capacity* at the same time obtain *durability and economy in operation*.

There are forty years' experience in the construction of Western machinery. The shelling and cleaning of corn has been a life study with us. We know your profits depend largely upon your facilities for handling grain and the condition it reaches the market.

In this day of competition and low margins it is necessary to bring your cost of handling grain to a minimum. You must have the full assurance that your equipment will clean the grain thoroughly and without being lost in the screenings. Breakdowns are costly, therefore your equipment must be simple in construction yet reliable. It must be durable and lasting, for buying a new line of machines every few years will easily consume your profits. It must have maximum capacity yet be simple in construction to bring down the cost of operating.

Thoroughly cleaned grain will raise the grade and bring a premium. Receivers and buyers of grain are constantly complaining about the poorly cleaned grain yet are free with comments on a good car of clean grain and are not backward in paying a premium for such.

Good system is essential to business success.

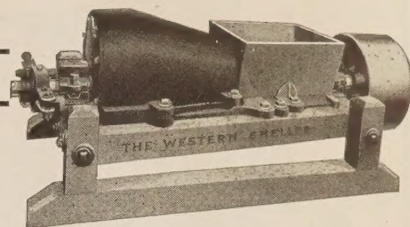
Make it a practice as a part of good system in your business to raise the grade of your grain by thorough cleaning, insuring a premium every time. This can be secured by equipping your elevator with Western Line of machinery, a dividend producing investment to-day for hundreds upon hundreds of elevator operators in this country as well as abroad. Ask any elevator operator with Western equipment.

Let us send you our complete general catalogue containing much valuable information obtained from our forty years' experience with elevator and mill machinery together with proofs and convincing evidence why Western machines stand supreme. It costs you nothing.

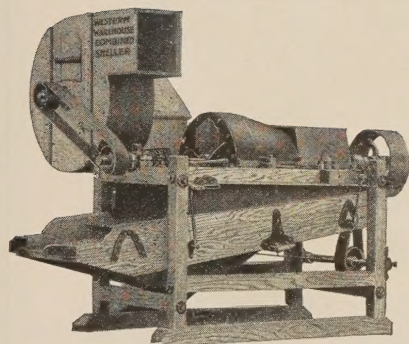
Union Iron Works

DECATUR, ILLINOIS, U. S. A.

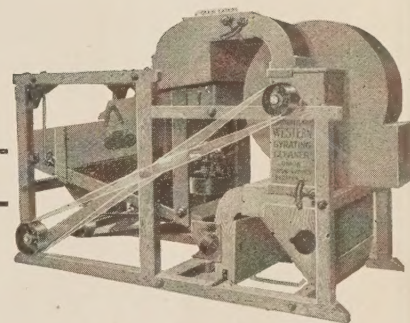
There is nothing in Western advertising that isn't in Western machinery



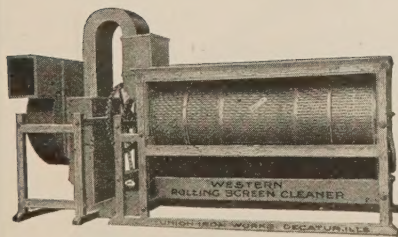
"Western" Regular Separate Warehouse Sheller



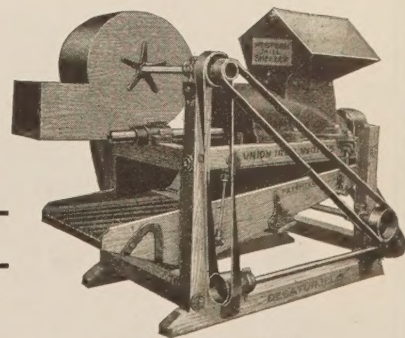
"Western" Warehouse Combined Sheller



"Western" Gyration Cleaner



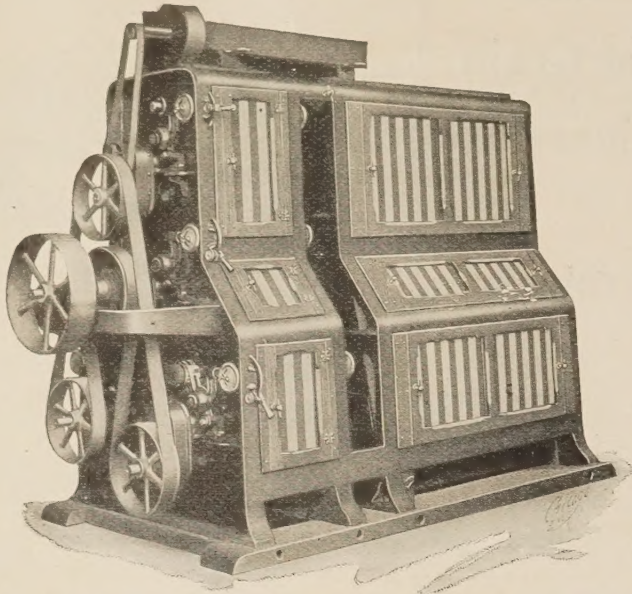
"Western" Rolling Screen Cleaner



"Western" Mill Sheller

These 4 Elevators Make Money

By Milling Their Wheat On A "Midget" Marvel



The "Midget" Marvel 25 Bbl. Self-Contained Roller Mill.
"A BETTER BARREL OF FLOUR CHEAPER"

This is the best money making proposition you have ever had the opportunity of investing in. It will turn your elevator into an all year certain profit earner. The sole secret is in the reduced cost of making a barrel of good flour.

Any intelligent man can successfully operate it.

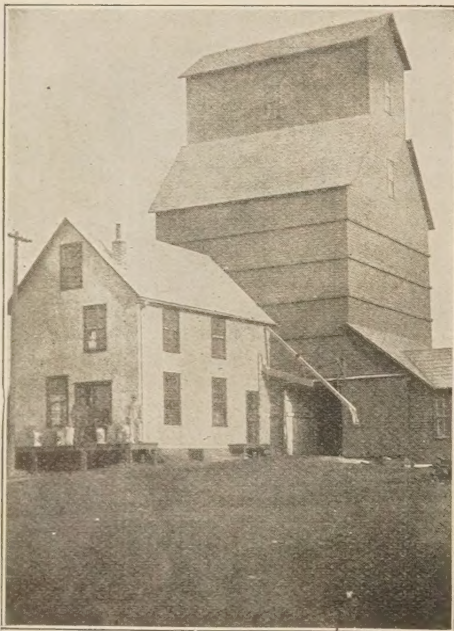
30 days' free trial—our guarantee reads as follows: We guarantee the buyer complete satisfaction and leave it entirely with him to say whether the "Midget" Marvel comes up to our description, guarantee and *his expectation*.

Write for our booklet, "*The Story of a Wonderful Flour Mill.*" We will be delighted to send it to you.

THE ANGLO-AMERICAN MILL CO.

404 Central Trust Building

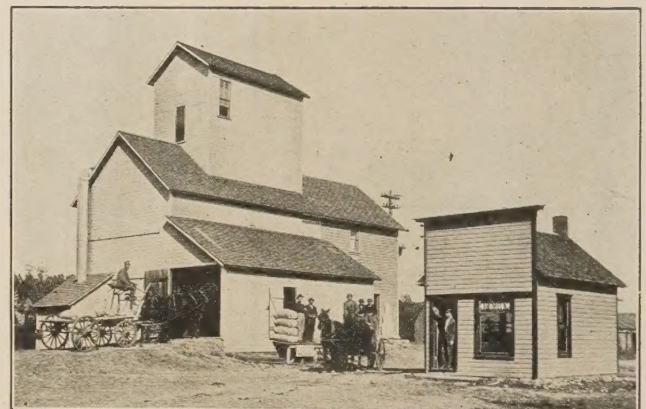
OWENSBORO, KENTUCKY



Osceola, Neb.,
Feb. 3, 1913.
Anglo-American Mill Co.,
Owensboro, Ky.

Gentlemen:—
Our "Midget" flour mill
pleases us in every way
with results. We are mak-
ing 42 pounds of straight
grade flour per bushel of
wheat. Our flour is com-
peting with all of the larger
mills and is giving the very
best of satisfaction.

Yours truly,
PETERSON & PETERSON.

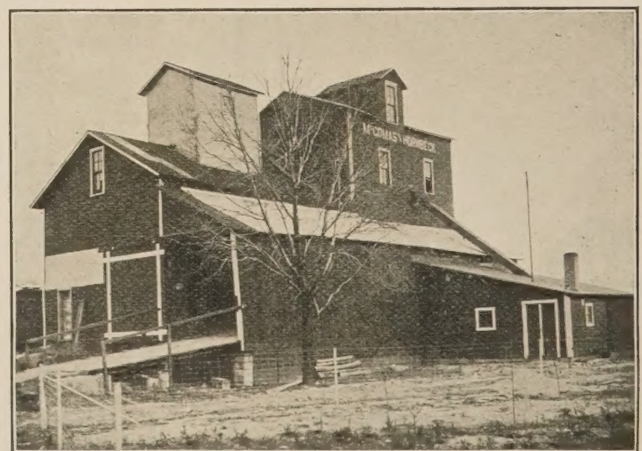


Jamestown, Kan., March 1, 1913
Anglo-American Mill Co., Owensboro, Ky.
Gentlemen:—We want to say to you at this time that we consider the
"Midget" Marvel the best investment we have ever made.

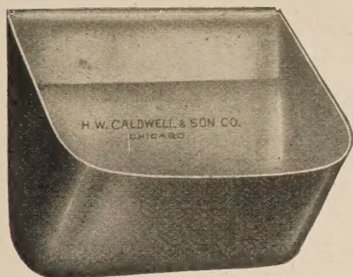
Respectfully,
GIFFORD BROS.



Black River Falls, Wis., Feb. 3, 1913.
Anglo-American Mill Co., Owensboro, Ky.
Gentlemen:—Test on 50 bushels of wheat ground on my "Midget"
Marvel gave over 43 pounds of flour to bushel. To say that I am pleased is
putting it mildly.
Yours truly,
JOHN F. DUNN.



Rossville, Ind., July 31, 1912.
Anglo-American Mill Co., Owensboro, Ky.
Gentlemen:—The flour made on our "Midget" Marvel is giving extra
good satisfaction and beyond our expectation. As it looks to us the proposi-
tion has a bright future.
Yours respectfully,
McCOMAS & HORNBECK.



Elevator Screw Conveyors Buckets

Salem Buckets fill easily, carry maximum load, and empty clean. Notice rounded corners and general shape. The best elevator bucket for all kinds of grain, and mill products.

Made in more sizes and gauges than any other bucket on the market. We fill orders promptly from the large stock which we carry.

SEND FOR CATALOG No. 34.

H. W. Caldwell & Son Co.

CHICAGO, 17th St. and Western Ave.
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.



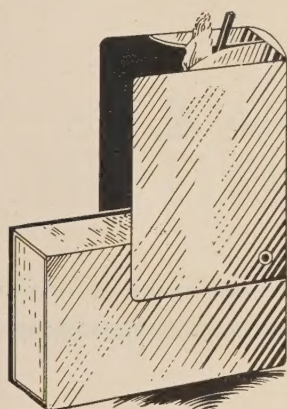
Unquestionably our Helicoid (continuous flight conveyor) is the best screw conveyor made. We are the originators of and fully equipped to make the sectional flight conveyor also, but advise customers to use Helicoid, because it is better balanced and more durable than any other screw conveyor, and renders more satisfactory service.

Helicoid conveyor is well adapted to the handling of grain and all milling products; cotton seed and cotton seed products, fertilizers, sugar, starch, rice, coal, ashes, cement, concrete, phosphate, sawdust and many other articles.

HELICOID COSTS NO MORE THAN OTHER CONVEYORS

H. W. Caldwell & Son Co.

CHICAGO, Western Ave., 17th-18th St.
NEW YORK, Fulton Bldg., Hudson Terminal, 50 Church St.



SHUR-LITE

ADVERTISING NOVELTIES

FOR CONVENTIONS AND HOLIDAY GIFTS
**WILL HOLD YOUR TRADE
BRING YOU NEW**

Write for an Assortment. Look them over.

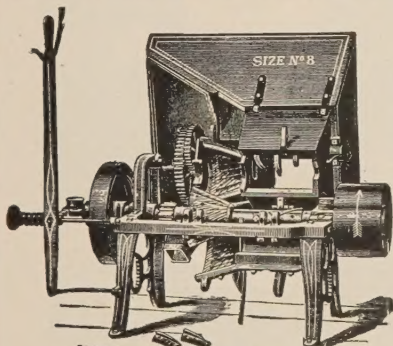
Leather Goods, Pencils, Match Safes, Pocket Knives, Etc. Tell us how many you want and the price. We have 3,000 articles to select from.

SHUR-LITE THE NEW SAFETY MATCH BOX that protects the light in any wind. Sample for 20c. Ask for quantity prices.

ALSCHULER

613 Schiller Building, CHICAGO

Bowsher's All-Around Feed Mill



Drive pulley overhung. Belt to it from any direction. Makes complete independent outfit.

(Sold with or without soaking elevator)

It CRUSHES ear corn (with or without shucks) and GRINDS all kinds small grain and KAFFIR IN THE HEAD. Has CONICAL shaped GRINDERS. DIFFERENT FROM ALL OTHERS. RUNS LIGHT. Can run EMPTY WITHOUT INJURY. Ahead of rolls or stones in speed and quality of work.

YOU NEED a mill now. Quit THINKING about it. COMMENCE to investigate. Give US a chance and we'll tell you WHY we think ours is the best.

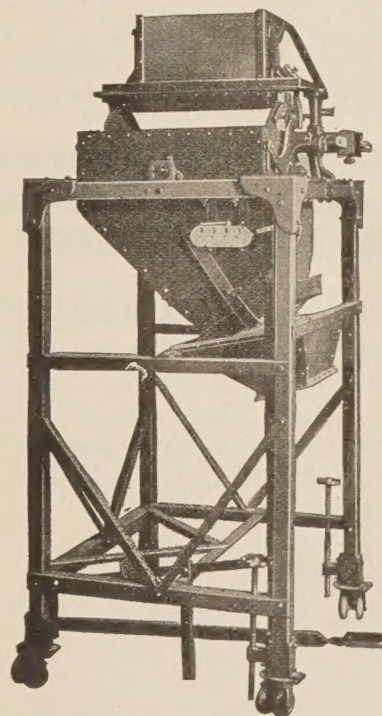
SEVEN SIZES: 2 to 25 H. P.

Circular sent for the asking.

THE N. P. BOWSHER CO., South Bend., Ind.

NOT A BILL OF EXPENSE BUT A SOURCE OF REVENUE

Enables
Shippers
to
Collect
Claims
—
Requires
No
Repairs
—
Occupies
Small
Space
—
Most
Economical
to
Install



PORTABLE BAGGER

Write for Catalog.

No Bother
to
Operate
—
Never
Gets Out
of
Order
—
Will Not
Rust
or
Wear Out
—
60 Days'
Trial

National Automatic Scale Co.
West Pullman, Chicago, Illinois

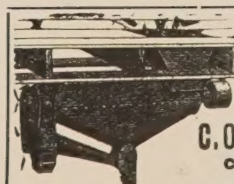
International Sugar Feed Co.

Minneapolis, Minnesota

MANUFACTURERS

International Sugared Dairy Feed
International Special Molasses Feed
International Sugared Horse Feed
International Sugared Hog Feed

These feeds are unequalled in nutritive value. Sold by dealers everywhere



Triumph
Power
Corn Sheller

C. O. Bartlett & Co.
Cleveland, O.

The Peerless Line

Includes Grain Feeders, Car Loaders,
Overhead Dumps, Man Lifts.

HIGH QUALITY FAIR PRICES

PEERLESS FEEDER COMPANY

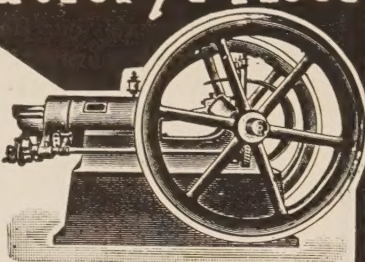
RHINEHART SMITH, Mgr., Sidney, Ohio
Ohio Representative Union Iron Works



Get my latest
Reduced
Factory Prices

Nobody
can sell you
better engines
than I make.—

Nobody will make you as low
prices as I am making this summer.



WITTE Engines 2 to 40 H-P.

Gas, Gasoline, Distillate, Naphtha, Kerosene

They have set the quality-standard 26 years. They still lead in quality—cheapest power-producing and utmost wear-resisting—quality. Elevator men, especially, **testify to that**, after years of trial.

BUT HERE IS THE BIG NEWS: You can buy a WITTE Engine for half the price asked for other so-called standard engines. *Five year guarantee with sixty day free trial.* I beat the field on quality and price and back every engine to the limit.

Buy Direct From My Factory

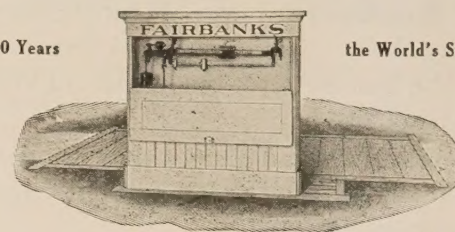
Save the dealer's expenses and profit. Besides, I have manufacturing advantages that give me a lower factory cost than any of them.

I want WITTE Engines in elevators everywhere. They are my best advertising. I can make money by selling elevators at my factory-cost. **Let me send you my special offer. Don't buy an engine until you get it. I'll guarantee to interest you by return mail.**

ED. H. WITTE, Pres. Witte Iron Works Co. Kansas City, Mo.
2429 Oakland Avenue

Uninterrupted, Accurate Scale Service Is Enjoyed by the Thousands of Users of Fairbanks Wagon Scales

Over 80 Years



the World's Standard

Fairbanks Scales installed over half a century ago are still rendering efficient service today.

The name Fairbanks on your scale inspires confidence.

Ask for Catalog No. 544A18

Fairbanks, Morse & Co.

900 S. Wabash Avenue,

Chicago

Oil and Gasoline Engines, Pumps, Windmills, Feed Mills, Water Systems,
Electric Light Plants, Dynamos and Motors.

Ask About the Things You Cannot See

Look at the picture. It shows as well as a picture can what the **Wolf Jumbo Two Pair High Feed Grinding Mill** is like on the outside.

But there are other things, the parts that are hidden from view, that are of just as great importance to the prospective feed mill purchaser as the outer appearance of the machine.

There are the bearings. You don't know what the bearings on this machine are like or why they minimize the friction list. *But they do!*

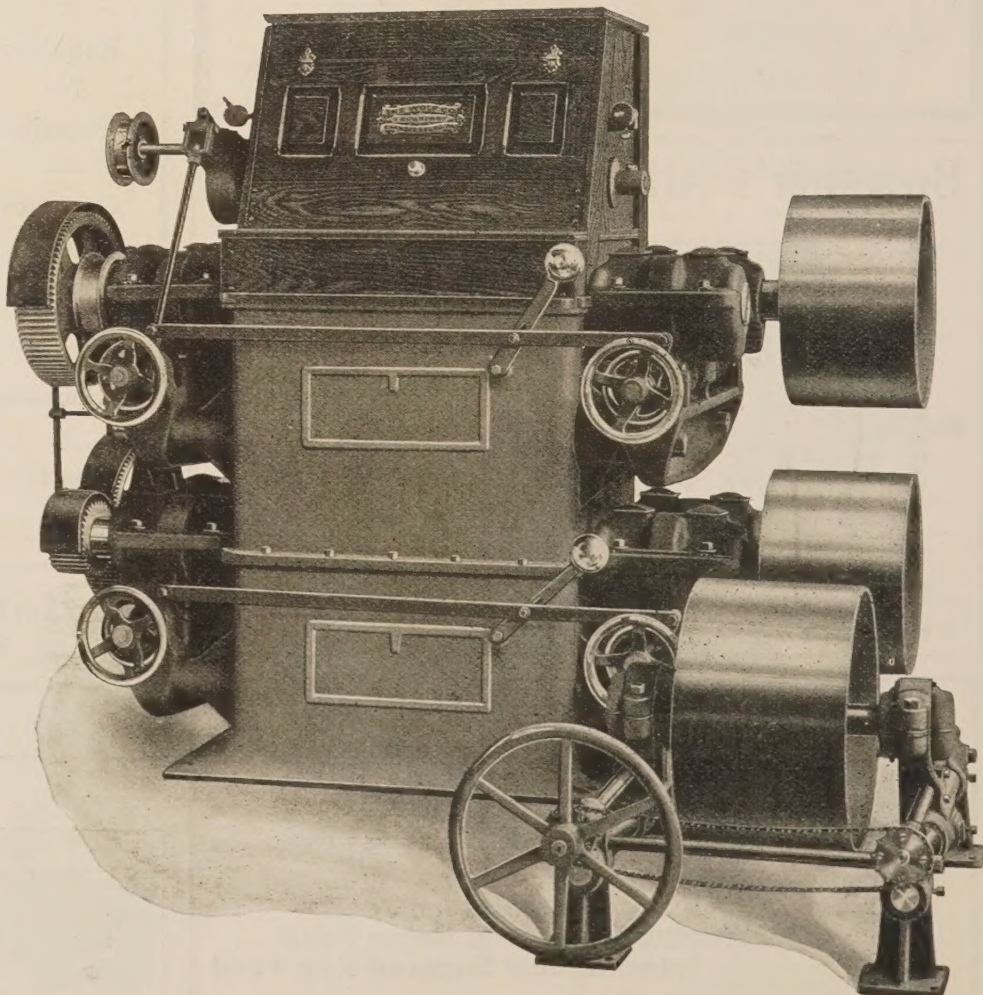
There is the feeder mechanism. You have a hazy idea that it is probably somewhat different from other feeders. And it is *considerably!*

There are the grinding adjustments. You can't tell from the picture why they are such positive safeguards to the rolls. *But they are!*

It is about these important features that you want to know—and we want to tell you.

If you write that letter NOW it will only be two or three days 'till you know as much about this machine as we do. We have nothing to hold back.

THE WOLF COMPANY
CHAMBERSBURG, PA.



Successful Because It's Deserving

The Ellis Drier is the only drier ever constructed which **at a given point** forces its air into the grain layer from **opposite sides**. This means that with a grain layer $2\frac{3}{4}$ inches in thickness, which is our standard construction, **the actual distance which the air has to penetrate to reach the center of the grain mass is only $1\frac{3}{8}$ inches.**

That is the reason why you can remove as little as one-half of one per cent of moisture with an Ellis Drier and do it evenly.

Some people tell us that we are carrying the idea of the thin layer to an extreme, but they have always been those who have never had actual grain drying experience. They don't know how difficult it is to remove, **evenly**, small percentages of moisture; they don't realize that it is right there where the money lies, nor do they know what it means to have a car rejected because when it reached its destination it was heating owing to uneven drying or improper cooling.

The secret of the unequalled quality of work accomplished by the Ellis Drier lies in the fact of the absolute evenness of its work.

To show you how far people can deceive themselves regarding the drying of grain, we quote the following paragraph which recently appeared in one of the trade papers. Referring to the "scientific use" of a drier and deprecating the use of thin columns or layers of grain, the writer says: "A housewife or a chef would not think of slicing up a turkey or a roast of beef into thin slices and hang it inside the oven to bake every particle of the natural ingredients out of it, rendering it unfit to eat." In the first place well dried grain is not baked or roasted, it is dried, which is considerably different; secondly, totally unlike the process of drying grain, a piece of meat is roasted or baked for the express purpose of retaining the juice or water, and not to expel it. We suppose the writer of this article would also advocate that the housewife hang up the family washing in one big, solid, soggy bundle to dry.

The Ellis is the only drier which applies its air to both sides of the grain layer.

THE ELLIS DRIER CO., Postal Telegraph Bldg., Chicago

Aspirators
Bag Filling Machines
Barley Machines
Blenders, Flour
Bolters, Flour, Meal and
Special Products
Buckwheat Machinery
Cleaners, Corn and Grain
Conveyors
Coolers, Meal
Crushers, Corn
Degerminators, Corn
Distillers' Machinery
Dressers, Flour
Dryers, Meal
Dumps, Wagon
Dusters, Bran
Fans, Exhaust or Ventilating
Flour Mill Machinery,
"All Kinds"
Grain Cleaning and
Grading Machinery
Grain Elevator Machinery
and Appliances
Heaters, Grain
Hullers, Rice
Mill and Factory Supplies
Mills, Buhr Stone

Throughout more than sixty years of uninterrupted successful mill building Nordyke & Marmon Company has been producing flour mill machinery and equipment of unequalled quality. The machines that are being built today embody the original principles but are vastly improved in efficiency and capacity. They include every device that practical millers, expert engineers and trained mechanics can suggest to successfully improve milling conditions. In every way that counts for the user's benefit, they are second to none.

Each new device and machine is subjected to a gruelling test in an operating flour mill of our own. It must stand up under the most critical criticism before it goes on its way to a prospective user. It is this rigid standard of service and responsibility to the ultimate user that has made Nordyke & Marmon Co. known the world over as "America's Leading Mill Builders." Our interest in our work does not cease when the last payment is made. It lasts as long as the mill lasts; long years afterward.

The lists shown herewith give you an idea of the different machines we build for your use. Our catalogs tell you in further detail why these machines fulfill your requirements so thoroughly. A letter will bring a description of the machine you need. Write it now.

Mills, Feed Grinding
Mills, Roller
Movers, Car
Oat Meal Machinery
Packers, Bran, Feed,
Flour, Meal
Power Transmitting
Machinery
Pulverizing Machinery
Purifiers, Flour and Meal
Reels, Bolting
Roll Grinding and
Corrugating
Rope Transmission
Machinery
Scalpers, Corn Mill
Round Reel and Hexagon
Screening Machinery
Separators, Dust
Shellors, (Corn) Hand and
Power
Sieves, Starch
Sifters, Flour, Meal, Etc.
Starch Factory Machinery
Steamers, Grain
Take-ups, Belt and Rope
Temperers, Corn and Grain
Valves, Three-Way

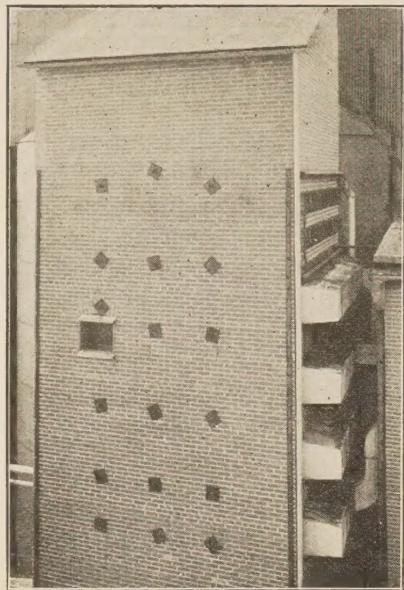
Nordyke & Marmon Company
America's Leading Mill Builders

INDIANAPOLIS, INDIANA
Established 1851

THE REYNOLDS DRIER

The Reynolds Drier is the first that solves the problem, for doing perfect drying.

With it, corn is dried, and left with an appearance of old corn, and the best judges can not detect it.



Every kernel is heated uniformly, before it is subjected to the drying air, the hot air only carrying off the moisture, leaving the grain in the same condition, as though it had been dried by nature.

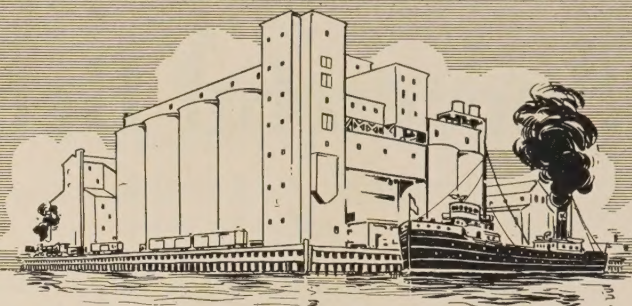
It is a continuous process, and dries the material uniformly, which is a feature, on a large scale, that excels all others.

For Milling and high class purposes, it has no equal.

For further information, write

E. H. REYNOLDS

332 So. La Salle Street - - CHICAGO, ILL.



Proved Economical and Reliable in Scores of Elevators

The belt we have furnished in the past has always proved reliable and economical—that is why tens of thousands of feet of Goodrich Grainbelt are going into the grain elevators of North and South America. Some recent large orders for

Goodrich Grainbelt

are: 9,865 feet for an elevator in Canada; 2,152 feet to another Canadian elevator; 2,620 feet for the Great Northern Elevator Company on one order, 2,560 feet for the Globe Elevator Company and 2,013 feet to Central Argentine Railway, South America.

Write for folder and full particulars

The B. F. Goodrich Company

Makers of Goodrich Tires, and Everything That's Best in Rubber

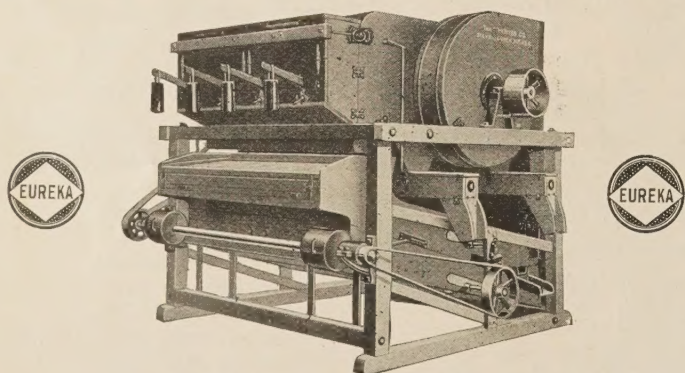
Factories
Akron, Ohio



Branches in
All Principal Cities

There is nothing in Goodrich Advertising that isn't in Goodrich Goods

EUREKA GRAIN CLEANERS



HEAVY DUTY CONSTRUCTION

This separator will with less power, prepare grain for shipment better and at a lower cost than any other machine. It gives no trouble to the operator, because the sieves are self-cleaning and the bearings and eccentrics self-oiling.

250-page Catalog free.

THE S. HOWES COMPANY
SILVER CREEK, N.Y.

REPRESENTATIVES:

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Box 661
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F. E. DORSEY
4015 Euclid Ave.
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J. Q. SMYTHE
1034 W. 32nd St.
Indianapolis, Ind.

W. M. MENTZ
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W. Va.

E. A. PYNCH
311 3rd Ave. S.
Minneapolis, Minn.

GEO. S. BOSS, Jefferson Hotel, Toledo, Ohio



The Logical Point

for your grain and seed consignments

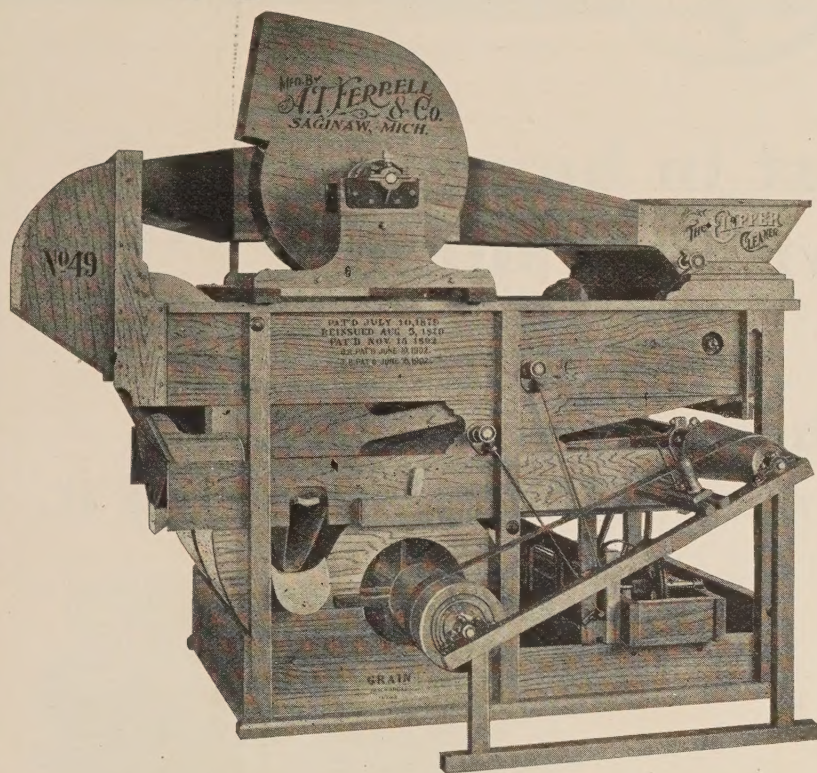
*Highest market prices
Prompt returns
Personal attention*

Southworth & Co., TOLEDO

Members Toledo Produce Exchange and Chicago Board of Trade

*"Consignments to Southworth
pay best"*

"Clipper" Grain and Seed Cleaners



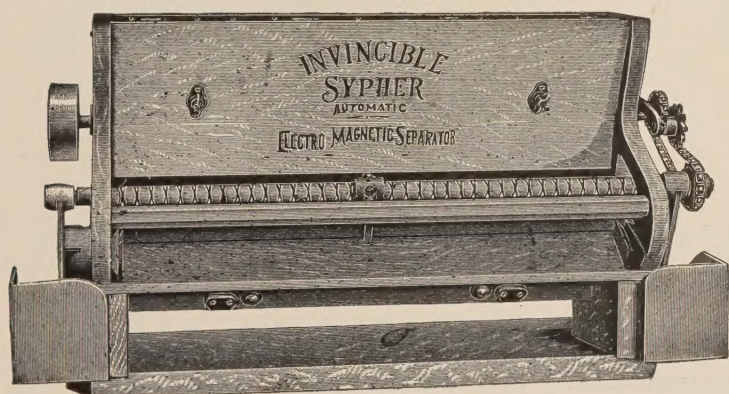
The No. 49 Clipper is a first-class grain receiving cleaner for local elevators. It has large capacity, is solidly built, is dustless and will make the most difficult separations. It is simple, strong, convenient and will not easily get out of order. It requires less for repairs than any other grain cleaner on the market and is always ready for business. Ours is the only successful combination cleaner on the market. We give a 30-day guarantee with each machine.

If you are looking for the best cleaner, we would like to show you what we have. Our line of clover seed cleaners is strictly up-to-date. All sizes and capacity. We can furnish machines with Traveling Brushes, Air Controller and all modern improvements. Send for catalog and discounts.

A. T. FERRELL & CO.,

SAGINAW, MICH.

THE INVINCIBLE-SYPHER Electro Automatic Magnetic Separator



Very Durable—Small Consumption of Current

Will positively remove all iron from the grain.
Has retaining force of 500 pounds, making it impossible for any iron to pass it.

This machine does not deteriorate with age—on the contrary actually becomes more efficient with use.

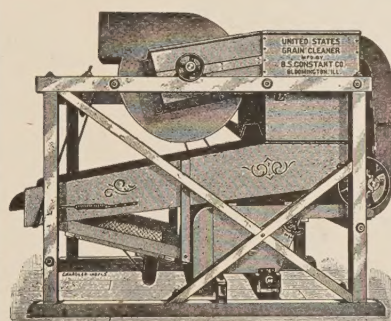
We are prepared to furnish a small inexpensive dynamo for it where current is not available.

INVINCIBLE GRAIN CLEANER COMPANY

SILVER CREEK, N. Y., U. S. A.

—REPRESENTED BY—

F. J. Murphy, 234 Exchange Bldg., Kansas City, Mo.
The Strong-Scott Mfg. Co., Minneapolis, Minn.
C. L. Hogle, 526 Board of Trade, Indianapolis, Ind.
Frank E. Kingsbury, 3418 Thomas St., St. Louis, Mo.
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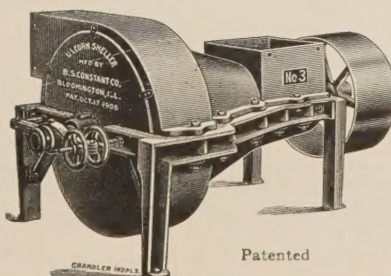
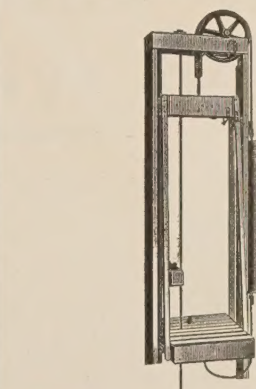
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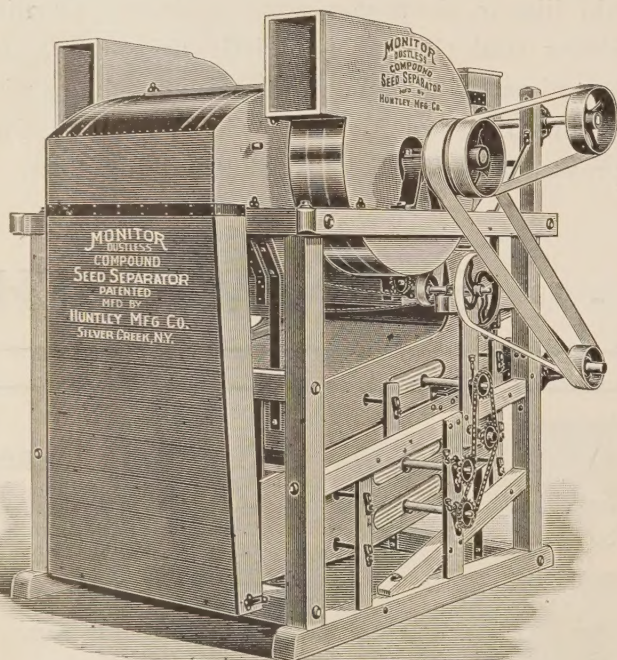


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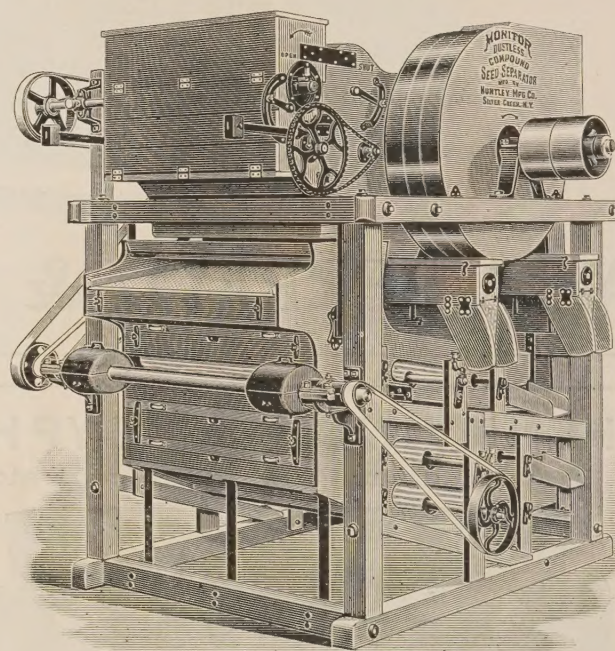
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A monthly journal devoted to the elevator and grain interests.

Official paper of the Grain Dealers' National Association and of the Illinois Grain Dealers' Association.



Published on the fifteenth of each month by Mitchell Bros. Publishing Co., 431 So. Dearborn St., Chicago, Ill.

Subscription price, \$1.00 per year.

English and Foreign subscriptions, \$1.75 per year.

VOL. XXXII.

CHICAGO, ILLINOIS, AUGUST 15, 1913.

No. 2.

Big Grain Storage Tanks Erected at Kansas City

Twelve Concrete Cylindrical Bins and Six Interstice Bins Recently Completed for the Chicago Great Western Elevator on the Kansas Side—Rapid Handling of Grain by Overhead and Tunnel Belt Conveyors

No greater proof of the wonderful fertility of the soil of the valley of the Mississippi and the Southwest can be adduced than the rapid expansion in elevator building in that territory during the past few years. Nature has been specially prodigal in those states, making it necessary to house a part of the vast amount of grain grown, to await con-

sumption, or to afford means to transfer it at the large terminals. Within the past few months several million bushels of storage have been added to the grain facilities of Kansas City, Mo., and Kansas City, Kan.; and in the accompanying illustration we show the new concrete storage tanks completed July 1, by James Stewart & Co. of Chicago, as an

annex to the tile tanks and working house of the Chicago Great Western Railroad at Kansas City, Kan.

The new tanks are twelve in number, which with six interstice tanks give a combined capacity for the elevator of about one million bushels. Each tank is 85 feet high and 27 feet 8 inches in diam-



NEW CONCRETE STORAGE BINS OF CHICAGO GREAT WESTERN ELEVATOR AT KANSAS CITY, KAN.
Designed and Erected by James Stewart & Co., Chicago.

eter, with a capacity of about 30,000 bushels each, for the cylindrical tanks, and 15,000 bushels for the interstice bins. A gallery through which runs a 36-inch belt conveyor extends the full length of the tanks, above them and grain is taken to the working house by a similar size belt conveyor running in a tunnel beneath. Rapid handling of grain is thus insured. A tar and gravel roof is spread over the top of the tanks.

The old working house and tile tanks were built in 1905. Tracks run on both side of the elevator, one side affording both loading out and receiving facilities, while one is for loading out only. The elevator is operated under lease by the Lonsdale Grain Company of Kansas City, Mo., one of the well known firms of that market. All the machinery was supplied by the Weller Manufacturing Company of Chicago.

Buying Wheat on a Cleaned Basis

Frequency of Wheat Shipments Full of Chaff and Impurities Demands Change in Buying—
Competition a Factor Which Causes Dealer to Hesitate—No. 2 "Blow" Contracts—Careless Farmer Should Be Made to Realize Advantage of Cleaning Wheat

By G. D. CRAIN, Jr.

The grain dealer, like most other people, has a not unnatural prejudice in favor of getting what he pays for; and, similarly, he is annoyed and irritated when he pays for a first-rate article and something far from that grade is delivered to him. The frequency with which this occurs, especially in the smaller grain centers, where the buying is frequently from the growers direct, has brought about a decision on the part of many dealers to avoid such complications in future by a distinct understanding that only what might be called the net delivery will be paid for.

That is, where wheat is either dirty or full of chaff and other impurities, it will be cleaned by the dealer, and payment made for what is left, on the agreed price basis; which is an arrangement so entirely fair and so eminently sensible that it is a wonder that it was not adopted long ago, not only by a few dealers, but by the trade in general.

Like a good many other changes in practice, which in some cases rise almost to the dignity of reforms, this one, as indicated, is the result of abuses of confidence, and resulting dissatisfaction with existing conditions, which permitted the abuse to occur. The farmer who had delivered his relatively small crop to the dealer at the market price for No. 2 red, knowing that it was loaded to the muzzle with various substances other than good wheat, and pocketed the proceeds notwithstanding, is about the only one who has any reason to object to the change; and, of course, it is against him that the new arrangement is designed to operate, and will.

Nor is it necessary to infer that the proverbial honest farmer is, even in cases where his wheat is not up to grade, intentionally "slipping one over" on the dealer. It is true that the big apples are usually found at the top of the barrel packed by the honest farmer, and also that stones mysteriously find their way into his hay at times. But, in spite of these circumstances, which might be called suspicious, it would perhaps be going too far to assert that some wheat growers intentionally permit the delivery of their grain in a remarkably mixed condition.

About the only conceivable excuse for the presence of an undue amount of chaff in a crop, however, is improper threshing, the use of a worn-out or otherwise inefficient machine. Of course, the farmer is not responsible for this in most cases; it is his misfortune, and not his fault. It is an easy matter to ascertain, however, that the threshing is not being done as thoroughly as it might be, and to make arrangements accordingly with the owner of the machine, in view of the possibility of friction with the grain buyer when the trouble is discovered.

The word "possibility" is used here advisedly, because under the practice generally in vogue among local grain dealers, the transaction is closed after the wheat is delivered and the check of the dealer cashed; and while the dealer may have a decided kick coming, it is usually too late for it to be productive of anything but bad feeling, and in consequence he usually passes the matter up, hoping to be a little wiser or a little more fortunate next time. He pockets his loss when he markets his grain in

the larger centers, and counts it all in as a part of the business.

Besides, the competition for the crop is usually so keen that it operates as another powerful cause to make the dealer decide to keep quiet about such matters, most of all to the farmer who has been the gainer by the presence of too much free soil or chaff in the wheat. If there is much of a protest from the dealer, the farmer can always come back with the retort that next season he will go elsewhere with his crop; and save in exceptional circumstances, this is a sufficient argument to silence the dealer, and induce him to attempt to smooth down his irate but guilty friend, rather than assert his rights further.

As a result of all this the average dealer is compelled to suffer a substantial loss when his grain gets to the central market and is graded. It is not often that sub-grade wheat is permitted to go through as at par. Inspection is usually sufficiently keen to detect even a slight inferiority, and anything which might be classed as bad is certain to result in trouble not only for the consignee, but for the shipper, who, of course, is the man who would logically receive the blame.

This is the situation where the dealer purchases only in relatively small quantities, direct from the farmer, and has no facilities for removing impurities from the grain which he handles. In such cases, as stated, he must send the grain forward as he receives it, and, being without redress against the farmer, suffers the consequences, as if he himself were guilty of some delinquency in permitting such things to occur; whereas, obviously, he is "more to be pitied than censured," as the lady novelists put it.

Large dealers, with better equipped elevators, including those with fanning and other cleaning devices especially, have always had within their own hands the remedy for this condition, but have not very generally applied it, owing to substantially the same reasons as those indicated above—competition, for the most part. The plan suggested, which, as stated, has been announced as a general policy, to be followed in the future without exception, is easily applicable in such plants.

With their equipment at hand, for the express purpose of preparing their grain, and sending it forward in the best possible condition, there is not the slightest excuse for bearing the brunt of the loss in the occasional case where a purchase is received which is not up to the standard in the matter of freedom from foreign matter. It may take a little nerve at the outset to put such a rule, or practice, or whatever it might be called, into effect in a given market or locality, but its fairness should in time win for it general acceptance.

After all, the terms of purchase and of delivery are almost invariably governed by written contract, entered into in advance, sometimes several months before delivery; and this being the case, there is no difficulty in the way of providing for the cleaning of the wheat after delivery, and payment on the basis not of the bulk of grain, etc., delivered, but of the clean grain which comes from the blowing or

fanning machinery; the matter taken out being delivered to the seller, if he so desires.

"It strikes me as wholly impractical," said a prominent grain man who heard of the stand taken by several concerns in this respect. "In the first place, you'll never get the farmers to stand for it—they simply won't consent to sell their grain on any other basis than so much for every bushel delivered at the elevator; and of course, the worse it is, the more they will insist upon a spot-cash transaction. In the second and other places, there would be the difficulty of keeping various crops and shipments separated in the cleaning, in order to ascertain just what the cleaned crop amounted to."

And yet, as was pointed out to this dealer, contracts based on an arrangement known briefly as "No. 2 Blow" are fairly common, and are, in effect just about what is proposed by the dealers who have determined to stand no more losses due to the presence of impurities in the wheat they buy. Wheat bought on the basis referred to is passed through the blower, and payment made for what comes out. In other words, the chaff, or "cheat," dirt, and whatnot that is extracted is not paid for as good No. 2 red wheat; and of course there is not the slightest reason why it should be.

Moreover, the drying of corn, as well as wheat, is done every day, certain percentages of moisture being taken out, according to order, and the identical grain, if desired, returned to the owner. Where such transactions as this are handled, in enormous plants, where the run of a big shipment is only a part of the day's work, there is no apparent reason why wheat which needs it should not be cleaned and re-weighed for the purpose of finding out what is coming to the shipper.

The real success of such a move, it must be admitted, would depend largely upon the number of dealers entering into it, especially in a single locality or market. Of course, if in a small town, surrounded by wheat growers, one of the only two dealers made his contracts on a basis of "No. 2 Blow," while the other took the wheat any way it came, trusting to his own wit to save him from too many losses, the latter would get most of the business, even from those farmers whose crops were always above reproach. This is only human nature.

But if the guarantee exacted by grading requirements at the big markets, which in effect penalizes all wheat which is not up to the required standard, is passed on down to the grower by the enforcement generally of the plan indicated, the careless farmer will in time learn that it is not to his advantage to make it necessary to clean his wheat, and so may realize the desirability of more care in the handling of his crop.

Of course, there is not so very much wheat which requires cleaning—perhaps, relatively speaking, there is very little; but there is enough to make it worth the dealer's while to see that the burden does not rest upon his shoulders, but upon those where it belongs. And the change can be brought about merely by the insertion into the next batch of contracts of a single simple but effective clause, if only that same bogey of competition does not prevent the dealers in a given locality from seeing what is to their best interests.

BALTIMORE PLANS CHANGE IN RAILROAD-OWNED ELEVATORS

The Traffic Bureau of the Baltimore Chamber of Commerce has announced that it will attempt to have changed the present method of leasing interior and terminal elevators. Declaring that the welfare of the port is at stake Herbert Sheridan, manager of the Traffic Bureau, is quoted as saying:

"There are many railroad-owned elevators leased to grain merchants, and steps have been taken to extend the custom. Discrimination is involved in this through the payment to lessees of a certain price per bushel the grain pays for elevation. Beyond this an undue advantage accrues when a merchant secures a valuable elevator lease at a nominal figure. Elevation service in connection with transportation of grain is part of the rate transaction and should be so considered. Baltimore feels

the effect of conditions that exist and aims to prevent a growth of the pernicious custom."

It is said that a bill will be presented in Congress at an early date by Representative Linthicum requiring railroads to own and operate interior and terminal elevators, and prohibit leasing of same where grain is accumulated and handled, to grain merchants or persons representing them, making provision for a suitable penalty for infraction of the law.

THE LAKE TRAFFIC SITUATION

Grain shipments by way of the Great Lakes fell off a little during the last two weeks of July. This was due to the usual midsummer dullness. A noticeable increase, however, has been made recently and there will probably be a large number of boats chartered in the present month.

An accident at an ore dock at Superior, Wis., which resulted in two men being killed and a number injured, caused a suspension of work, consequent interruption of railway traffic and a congestion of vessels. Grain shippers took advantage of the latter situation by lowering the rates in offers of tonnage to Buffalo from the head of the lakes, to 1¼ cents.

The work of adding 60 acres of available harbor to the port of Duluth has been commenced. At present the bay has 371 acres of water available for the big freighters, and when the reclamation is finished the area will have been increased to 430 acres. This will accommodate the largest fleet of boats that will ever be assembled at the head of the lakes, according to John H. Darling, chief assistant United States engineer.

According to the contracts of the dredging company in charge of the work 925,000 cubic yards of dirt will be removed from the bottom of the harbor. This will give Duluth one of the best ports on the upper lakes.

Although the American grain crop will be better than the average reports received by grain shippers at the head of the lakes indicate that the fall movement from Duluth will not be as heavy as it was last year. The Lake Superior grain trade took care

MINNESOTA ELEVATOR WRECKED BY CYCLONE

What a cyclone can do to a grain elevator is splendidly illustrated in the two accompanying views, which show the elevator of the Kasota Ele-

off, crashing down on to the Chicago, St. Paul, Minneapolis & Omaha Railway tracks where it completely blockaded traffic, at the same time moving what remained of the big structure off its foundation.

Some idea of the great force of the wind can be



END VIEW OF KASOTA ELEVATOR AFTER

vator Company, Kasota, Minn., after its encounter with one on June 26. The tornado struck the elevator about 1 o'clock in the morning, the funnel supposedly forming about one-half mile to the west, gathering force as it passed along and expending the greater part of its energy on the elevator.

One strange freak of the twister was that it

TRACKS WERE CLEARED OF WRECKAGE

had when it is stated that the building, despite its immense weight and solid construction, was blown bodily at least twenty-four feet to the east and out on to the tracks.

The main building was 44x168 feet, and on each side of it were train sheds 168x24 feet, and all were completely demolished. The annex to the north, with dimensions of 40x60 feet, is still standing but is so badly twisted and thrown out of shape that it will have to be torn down with the other buildings.

Out of the forty machines in the elevator but two were left intact. These stood near the west side of the building which seems to have been bodily lifted over these machines and set down again without even scratching them.

A gang of seventy men was immediately put to work cleaning the debris from the railway tracks, and in one of the illustrations this wreckage is shown piled up alongside of the tracks.

The elevator was erected about 12 years ago and for some time was operated by the Hubbard & Palmer Company. Later it was taken over by the Kasota Elevator Company. It has been appraised at \$140,000 and the loss is said to be partially covered by tornado insurance.

CASH GRAIN DEAL DEFINED IN COURT DECISION

The question of what constitutes a sale of grain was definitely established by the Minnesota Supreme Court on July 19. The decision handed down on that date affirmed a previous judgment of a district court in the case of E. L. Welch & Co., Minneapolis, against the Lahart Elevator Company.

The case was centered around the payment for 5,534 bushels of No. 1 northern wheat delivered in May, 1907, when the market price was 83¾ cents. E. L. Welch & Co. sold 5,000 bushels on the floor of the Minneapolis Chamber of Commerce in February, 1907, to W. B. Mohler, "to arrive," at any time before June 1. In April W. B. Mohler sold 10,000 bushels on the same terms to the Lahart Elevator Company. In May the Farmers' Elevator Company of Mapes, N. D., consigned four cars of grain to E. L. Welch & Co., which were inspected and then ordered placed on the Lahart Elevator Company's sidetrack. One



SIDE VIEW OF KASOTA ELEVATOR SHOWING EXTENT OF DAMAGE BY CYCLONE

of a large amount of tonnage in 1912, and good rates were paid from September to the close of the season. Vessel agents, however, are looking for an advance in the rates before long and are expecting that a rate of 2½ cents will be paid for shipments the latter part of September.

A solid train of Oklahoma oats was shipped from Madill, Okla., to Memphis, Tenn., on July 19.

covered but a narrow strip of territory, and its greatest violence was felt immediately in the vicinity of the elevator mentioned. Another large elevator a short distance southwest, was not injured in the least. Buildings just west of the railroad tracks also escaped the fury of the wind.

Upon reaching the Kasota Elevator, the rapidly moving air current twisted off the two upper stories of the elevator, and the wreckage was blown

car was unloaded on May 12, and the other three on May 13, the weights being published May 14. W. B. Mohler became financially embarrassed on May 13, and E. L. Welch & Co. notified the Lahart Elevator Company not to unload the cars. The notice arrived after the cars had been unloaded, and the Lahart Elevator Company took the grain, applying it on indebtedness claimed by it from Mohler.

The Supreme Court decided that the contracts were executory, and that title passed when the Lahart Elevator Company unloaded the grain. E. L. Welch & Co. is held to have no claim against the Lahart Elevator Company, but only against Mohler. The Welch company had made a statement to Mohler, charging him with over-delivery of 534 bushels on their contract, and also made a statement to the Mapes Farmers' Elevator Company, remitting for the value of the grain consigned. The court holds that while the unloading of the grain "was doubtless hastened by defendant on account of Mohler's known financial embarrassment," the unloading constituted delivery to Mohler, and the Welch company could only collect from him.

On the first trial of the case a verdict was directed in favor of the Lahart Elevator Company, but this was reversed by the Supreme Court on the ground that the facts should have gone before the jury. On the second trial the jury found for Lahart, and the decision today denies the plaintiff's motion for a new trial. In stating the law of the case, the court holds that in case of a cash sale, title does not pass until the price is paid, but where the contract is executory, "title passes at the time specific goods are appropriated to the contract."

FIRE DESTROYS LOCKLAND, OHIO, ELEVATOR

The elevator and warehouse of the John Mueller Elevator Company, Lockland, Ohio, shown in the illustration, was destroyed by fire on August 2. As may be gathered from the picture, it was a somewhat unusual type of elevator, the buildings being constructed of brick with slate roofs. The fire originated in the grain elevator, shown at the rear, and spread to the building in the foreground which was used as a hay and feed warehouse.

The blaze was discovered by an employe of the

but it is reported that the elevator will be rebuilt immediately.

DISADVANTAGE FROM ELEVATOR LOCATION

BY J. L. ROSENBERGER.

A carrier is bound to treat all shippers with equality and without discrimination. It is also bound, unless there be custom or contract to the contrary, when it receives shipments in carload lots, to make delivery at the consignee's place of business when located on its industrial tracks, or to connecting carriers and switching roads when the consignee's business is located thereon. It is not, however, bound, at its own charge, to make such delivery beyond its own or leased tracks. So holds the Supreme Court of Minnesota in *Banner Grain Company vs. Great Northern Railway Company*, (137 Northwestern Reporter, 161), an action to recover for the amount paid the defendant for switching cars to the plaintiff's elevator on the alleged ground that the exaction thereof was a discrimination, where the court affirms an order denying a new trial after the trial court had found as a conclusion of law that the plaintiff was entitled to recover only \$1 and costs, and ordered judgment accordingly.

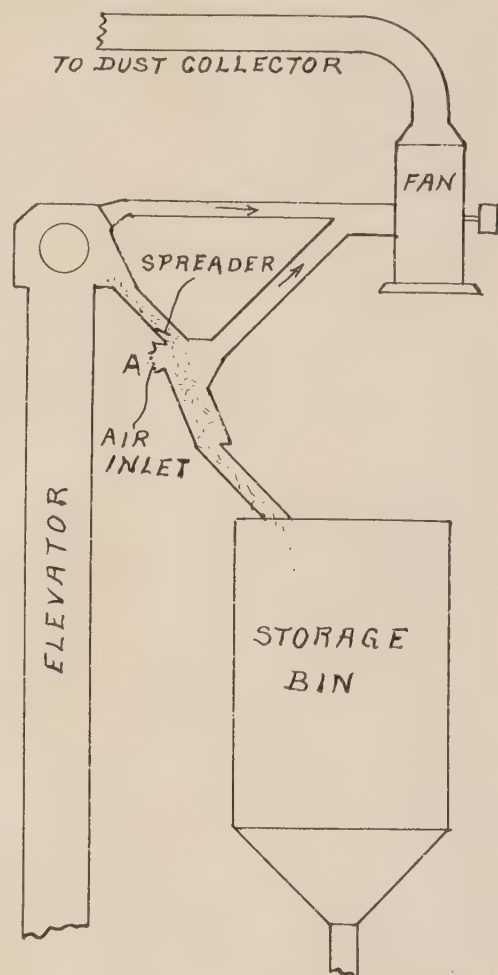
The Court says that it appeared from the facts found by the trial court that the plaintiff's elevator was not located on the tracks of the defendant or on any track leased by it, but upon that part of the tracks of another carrier in which the defendant had no rights whatever. It also appeared that the switching charges in question were collected from the plaintiff for the Great Western, in accordance with its published tariff rates, and paid to it. The charge of \$1 for each car switched was not for the defendant's benefit. It made no charge for its services in switching the cars either to the industries on its leased tracks, or in switching them to industries not on such tracks. It simply collected from the plaintiff the necessary switching charges exacted by the Great Western, in accordance with its published tariff rates for switching the cars over the part of its tracks not leased.

It was clear, then, that the defendant treated all shippers similarly situated with equality. The plaintiff's misfortune was that it was not on the leased

PREVENTING DUST EXPLOSIONS

BY W. G. CLARK.

Recently the country was startled by the horrible disaster caused by a dust explosion in the plant of the Husted Milling and Elevator Company at Buffalo, N. Y., in which 29 lives were lost, a large number of persons injured for life and valu-



A DUST COLLECTING SYSTEM FOR ELEVATOR

able property destroyed. This appalling disaster should make us all stop and reflect, and strive to do all we can to eliminate as far as possible the dangers of a repetition of it.

In the first place, there is little evidence advanced as cause for this terrible disaster except a dust explosion. Therefore we will consider this the source of the disaster.

I claim that a large percentage of the dust in grain could be eliminated if proper means were employed, with this object in view, before the grain is stored in the grain bins. That is to say, that to the receiving elevator which delivers the grain to the storage bins there could be attached an air suction to separate this dust while it is being spouted into the storage bin.

A good many years ago the writer proved this fact out beyond a question of a doubt, and it was surprising to see the amount of dust and chaff, light screenings, diseased grains and even weevil and other bugs that was pulled out by a simple aspiration of the grain; and by doing so we greatly reduced the danger of grain heating and becoming unsound, at the same time putting the grain in the receiving bins in such a shape that it obviated to a large extent the danger of fire and explosion. Furthermore, it relieved the regular line of grain cleaners of a certain percentage of their work. Therefore, the result was that the grain went to the grinders in better shape.

The aspirating outfit, of which a rough sketch is shown herewith, can be very easily and without much cost applied in most all cases, and the writer feels that it should be made a rule of the insurance companies that all elevators adopt some such means as this.

There is a large amount of dust in all grain as delivered to elevators, even as it comes from farmers' wagons. All of the material mentioned above



ELEVATOR OF THE JOHN MUELLER COMPANY, LOCKLAND, OHIO, WHICH WAS DESTROYED BY FIRE

feed store early in the morning and the alarm immediately given, but by the time the firemen arrived on the scene such headway had been gained as to prevent hope of saving the plant.

The elevator measured 40 by 40 feet and had a storage capacity of 18,000 bushels. It was designed by H. C. Teeter of Hagerstown, Ind., who also installed all the machinery. The latter was thoroughly up to date in all respects, including a Western Pitless Sheller, Monitor Combined Corn and Grain Cleaner, Bowsher Feed Mill, Monitor Cracked Corn Grade, portable scales and an automatic scale. No figures regarding the amount of loss have been given out,

tracks. The facts showed that there was no discrimination against the plaintiff, unless the defendant was bound to secure and pay for a lease of the tracks to the elevator of the plaintiff. Whether the plaintiff might have secured free switching of cars from the defendant's line to its elevator by application to the proper commission the Court need not inquire, for the fact remained that the defendant could not before an adjustment of the matter by the commission furnish such free switching without either securing an extension of the leased tracks, and paying therefor or by paying the switching charges

that is not eliminated from the grain before entering the storage bins will have to be taken out later on by the regular line of grain cleaners. Why not do this before it is put in the bins, and thus greatly reduce the danger of grain-heating and spoiling and also eliminating to a large extent the danger of dust explosion? This dust can be collected and saved, at least 95 per cent of it, and can be weighed up and checked against the car weights just as well before going in the bins as after going through the grain cleaning department.

The dust from corn consists of light, flaky bee-wings, silk and other very light dust which is dangerous and, I believe, explosive when put in contact with fire or extreme heat. I believe that the inspection laws covering elevators and mills should

be more rigid and that owners should be forced by law to be more careful in cleaning grain that is stored in their elevators or is shipped out of their elevators to their customers.

It is a fact that there are two very important points in regard to eliminating dust from all kinds of dusty plants. First, the dust floating in the air, and, secondly, the dust that is mixed with the grain and stored with same in the storage bins. In the latter case I appreciate the fact that it is hard and difficult to eliminate all of this dust and other combustible material, as grain will wear off in being handled, but I do claim that a large percentage of the loose dust that comes into bins with different kinds of grains can be eliminated and should be by all honest and careful grain men.

shall go to the god. Once a private person lends 1440 ka of Wheat, to be repaid, without interest, in two months' time, to the god, not to the lender.

There is one instance of what appears to be a purely commercial transaction in Wheat, in which 110 ka of Wheat are borrowed at an interest of one-third the principal. It is to be supposed that this loan was in a plentiful year, and not for seeding—that is, the borrower participated with the lender in something of profit.

It is conjectured that the system of lending Wheat for useful purposes from the bins of the temple granaries continued from the time of such cities as Accad, Eridu, Nippur, etc., to the end of both Nineveh and Babylon. Hence grew and was established the custom of the banker to look well into the purposes for which the loan was to be used. The plans of the borrower are usually stated in the contract.

(TO BE CONTINUED.)

The Romance of Grain

A History of Grain and the Grain Trade of the World from Remote Ages

By JOHN MCGOVERN

Author of "The Fireside University," "Hospitality," "Paints and Pigments," "Trees," "An Empire of Information," Etc.

THE CARAVANS (CONTINUED)

CHANGES.

The first great shock to the Caravan trade came with the immediate results of the voyage of Vasco around the Cape of Good Hope. The next came with the Suez Canal—great indeed. And now the Trans-Siberian Railway cuts away the big Caravan journeys to Nishni-Novgorod. The Sea Caravan down the Volga, however, gives evidences of lasting service.

We in America, with our trans-continental railroads, await a change that may follow the opening of the Panama Canal—a change so momentous that, seemingly, it must make greater financial readjustments, liquidations and desuetudes than were ever seen before in the history of the world.

IX

CHALDEA'S DAUGHTERS

THE SEVEN MONARCHIES.

The nations that followed Chaldea in Mesopotamia were Assyria, Babylonia, Persia, Media, Parthia and the Macedonian. At one time the Assyrian Empire was of tremendous size and power, with Babylon as its capital, and later Persia took both Babylon and Egypt. Alexander finally took all.

The cities of Mesopotamia, as known by the libraries which we are now to explore, rose long after Egypt.

When the Aryans came down from the Aral region they seem to have displaced a race looking like the Chinese, who used a writing that might be the parent form of both Cuneiform and Chinese.

The yellow men (called Turanians) may have gone eastward. Lenormant thought the Chinese might be the descendants of Gog and Magog, in Tenth Genesis.

BEGINNING OF THE GRAIN TRADE.

The Grain Trade, as a business, is essentially Chaldaic, Babylonian. In its essence, the Egyptian system discouraged and despised such a calling. It was the Babylonians who gave to Credit the essential value of Money—who recognized that, in the end, money can be nothing but credit. In the libraries of the ancient Chaldean cities there is the constant phrase, "Money of A— upon B—," and this means the credit that A— enjoys with B—. In Babylon and Nineveh a loan to B— might enhance his standing. In Egypt it could only render B— an object of pity or contempt.

ANTICHRESIS THE FATHER OF INDUSTRIOUS POVERTY.

It was in Babylon that the idea of ownership without use or possession first was gradually entered into the human conscience as right. For ages the land and its products had gone from father to son, and could not be alienated by sale, or, rather, nobody of alien blood sought to secure the land.

About 4,200 years ago the Babylonian owner of silver, copied, from temple practices, the antichretic mortgage—the entering wedge of the real mortgage. A— had land that grew Wheat; B— had silver that enabled him to buy Wheat and sell it at a profit.

B— lent silver to A— until after the harvest, or until after *all* harvests; A— lent to the banker the products of his lands during the time he enjoyed the use of the silver. It was expressly stipulated that there was "no interest for the money, and no rent for the property." Thus the ancient laws against usury and rent were circumvented, usury was made respectable, and commerce was given an impetus that has resulted in the buildings, steamships, canals, water powers, and machinery of the modern world—together with the lazaretto of Naples, the Whitechapel of London, the East Side of New York, and the river wards and bed-houses of Chicago. Interest has been a means of shirking labor as well as exacting labor.

Prof. Simcox (1:323) says: "These contracts take us back to the natural foundation of the practice of 'paying interest' upon loans. When the habit of owning property is formed, a distinction is drawn between articles which have a monetary value in use, such as food, and those which in their nature tend to multiply, and therefore are worth, prospectively, more than their present value for consumption. The typical example is the measure of Wheat, which can be ground to make bread now, or used to sow a field to make more Wheat next season."

In the early ages of borrowing at the bank, the bank figured as a debtor just as humble as the borrower. When borrowing and lending for using or hire became legal and honorable, the Grand Caravan might carry the fame, dyed garments, and Wheat of Babylon from sea to sea. And it was only in years of famine or war that the operation of the antichretic mortgage was unjust.

"THE HOUSE OF ABUNDANCE"—THE TEMPLE.

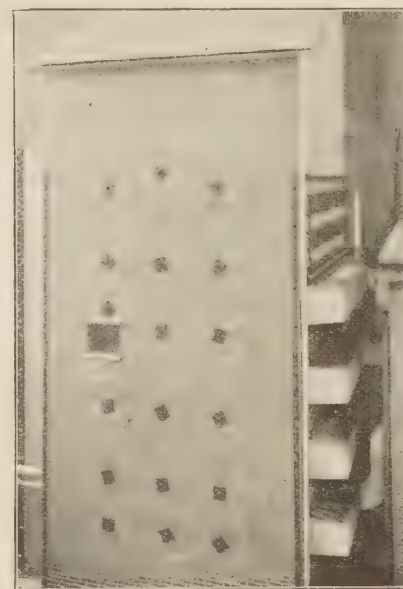
The Church was the State. In the earliest cities it was the Church that instituted the antichretic idea, which, afterward, the private banker at Babylon was allowed to exploit. The public granaries were kept full in fear of famine. It was conjectured that there would be three bad years in 30, and that there *might* be nine. Now, with an unusual number of fat harvests, the accumulations in the temple granaries would offer various problems of mildew, vermin and overflow. To lend Wheat to the farmer for seed, after a year of famine, would bring fresh Wheat to the endangered granary; and the farmer and worshiper, in repaying, might well offer a gratuity to the gods. This really was the first "interest" or "increase" paid on anything vegetable or inanimate, and the documentary records of such payments come from Eridu and other early Chaldean cities. There are three cylinders or records extant where Wheat is lent till harvest, "without interest" by the Priestess of the god Samas. The treasury of Samas lends Wheat twice on the same terms. Once a private person and once a priestess lends Wheat with the stipulation that the interest shall be paid to the god Samas. Once a priestess of the god lends Wheat till harvest, when both principal and interest

A REYNOLDS DRIER AT LOUISVILLE

Although not one of the older driers, yet the Reynolds system of drying, as housed in the building which our illustration represents, is claimed to be the most perfect method of drying grain that has ever been put on the market.

The drier is in operation at the Callahan Sons' Elevator at Louisville, Ky. It has a capacity for drying 1,500 bushels per hour and the system includes three distinct continuous operations, the grain passing through the heating chamber, the drying chamber and the cooling chamber.

The drier is first filled from the top to the bottom with grain from the elevator. Four rows of perforated ducts or passages lead through the drier



VIEW OF REYNOLDS DRIER INSTALLED AT LOUISVILLE, KY.

extending out from the drier in the form of hoods, as shown at the right of the illustration. These ducts divide the drier into chambers, the three at the top containing hot air and the one at the bottom, the cooling air. After the grain is subjected to the cool air in the lower and cooling chamber, it is drawn off by conveyor and returned to the elevator.

The essential idea of the drier, which originated with E. H. Reynolds of Chicago, the manufacturer, is that pre-heating the grain before it enters the drying chamber, every kernel is heated to the temperature desired for drying before coming in contact with the drying air. The plant at Louisville is reported to be operating steadily and giving unusually satisfying results.

A contract to supply the government with 2,500,000 pounds of timothy, 1,500,000 pounds of oats, 500,000 pounds of straw and 50,000 pounds of bran has been awarded to D. L. Lytle of Miles City, Mont. T. C. Power of Helena, Mont., was awarded a contract for supplying 1,000,000 pounds of alfalfa.

Tri-State Association Meets at Toledo

Members Get a Line on the New Crops—Discuss How Hay Business Should Be Conducted—Buying of Grain on Grade—Prohibition of Grain Storage by Law—Co-operation—Ohio's New Seed Law—Misleading Newspaper Market Quotations

The mid-summer grain trade conference of the Tri-State Grain Producers' and Dealers' Association held at Toledo, Ohio, July 29, was attended by about one hundred shippers of northwestern Ohio, north-eastern Indiana and southeastern Michigan.

Coming as it did during harvest and just before the movement of new grain became active, shippers were anxious to get a line on the new hay and grain crops. An interesting program was arranged to bring out this information as well as discussions on topics of special interest to the trade at this season.

The weather being extremely hot, preparations were made to make the meeting hall at the Boody House comfortable by installing a number of electric fans but owing to the counter attraction in Toledo, the Perry's Victory Centennial celebration, the dealers were strongly lured by the parades, motor boat and automobile races, thus preventing the meeting from starting promptly on time. A number of dealers also visited the Produce Exchange during the morning session, receiving a hearty welcome by the receivers. The meeting was therefore deferred until 1:30 p. m. and with the kind invitation of the Produce Exchange the session was held on the 'Change floor, making it unnecessary to use the hot assembly room of the hotel.

CROP REPORTS

The session opened with a general crop discussion. In getting a line on the new crops, shippers from the various counties were called upon to make a report from local observations. The general opinion was that the wheat crop was fine with a good yield but the acreage small and producing from 20 to 40 bushels per acre.

Oats showed $\frac{1}{2}$ to $\frac{2}{3}$ crop, producing from 20 to 60 bushels to an acre according to the locality. Rye and barley crops were practically a failure.

The outlook for corn was said to be good, in fact it was conceded that it never looked better.

A heavy crop of hay was reported in all counties, being composed of clover and clover and alsike mixed with very little timothy.

F. O. Paddock, president of the Toledo Produce Exchange, extended a most hearty welcome to the visitors in behalf of Toledo and the members of the Produce Exchange.

ADDRESS ON "CO-OPERATION"

President Rice then presented H. I. Shepherd, vice-president of the Ohio Savings Bank and Trust Company, Toledo, who gave a brief but interesting address on "Co-operation." Mr. Shepherd spoke as follows:

The city of Toledo occupies a strategical position with reference to the business of the states of Ohio, Indiana and Michigan, and the number of organizations meeting in the city, composed of business men of this territory, is constantly increasing. The city appreciates its relationship to this business, and to these men, and is endeavoring to co-operate to the mutual advantage of the city and the surrounding territory. Within the last few years, some two thousand men in Toledo have organized for the sole purpose of co-operation—men heretofore unused to working together and many of them unused to working at all for an unselfish public service. Organization has become a necessity of the day. Men can no longer confine their thoughts to their own shop, their own farm, their mill, or their store, for the reason that the world is constantly moving away from them. We must adapt ourselves to the new pace.

The Expansion of Competition

Competition is no longer merely individual. It has become territorial. One section of the country is pitted sometimes against the whole world in the marketing of its products. Two men in the same line of business in the same territory, each trying to tear down the other's business, are eliminating their territory from its share in the legitimate profits of their business, as well as discrediting the business in general.

On the other hand, an attempt to take from the people of any territory an unjust profit is a short sighted business policy. It is this side of the question that is being dealt with by legislation. Organization of producers and handlers is necessary to prevent waste and

duplication. The line of demarcation between legitimate organized effort and illegitimate is not ascertained by statute. It must be ascertained by conscience. Conscience in business is the determining factor. When men in business organize to conscientiously serve the people effected, legislation will evidently declare the method legal. It is time for the conscientious men in business to control our business organization.

The Range of Grain Trade Problems

We get out of a thing exactly what we put into it. You can make of this association just what you desire. Your problems begin with the problems of the farmer, and end with the problems of the consumer. Both have been suspicious, but when both are intelligently informed upon the subjects with which you have to deal, both will co-operate.

BUYING GRAIN ON GRADE

In opening a discussion on the subject of "Buying Grain on Grade," Secretary Riddle spoke as follows:

"It appeals to me that the paramount issue of the future will be the introduction of the practice of buying grain from farmers upon its grade merits. The practice of buying good, bad and indifferent grain all upon the same basis and at the same price is unfair to the farmer and public sentiment is arising against it. The paying of the same price for good and bad places a penalty upon quality and a premium upon inferiority. During the next year our association will concentrate on a campaign for the introduction of the practice of buying grain upon the grade rules upon which it is sold."

Opinions were asked for by Mr. Riddle as to whether the information found in the Daily Market Information Card is of definite assistance to shippers. This card is intended to give the subscriber a line on prices to pay for grain as based on the Toledo call, allowing 3 and a fraction cents on oats, 4 and a fraction cents on wheat and corn, \$1.25 on clover seed, \$1.00 per ton on hay as a reasonable and equitable margin of profit per bushel to the shipper. These margins were considered by shippers to be almost right and safe to figure upon and the card was said to be of help to them.

CONDUCTING THE HAY BUSINESS

On the subject of "How Should the Hay Business be Conducted?" a resolution was formulated not to buy hay, "mow or stack run," and not to take balers' tag weights but to buy it on wagon weight and subject to the National Hay Association rules and gradings. On this basis hay could easily be handled at 50 cents a ton, it was conceded.

PROHIBITION OF GRAIN STORAGE BY LAW

With reference to the subject of "Should Storing of Grain be Prohibited by Law?" J. W. McCord of Columbus, Ohio, stated that Ohio has no such law, while in certain other states this comes under the jurisdiction of a public warehouse law. He said that he hoped to see a uniform warehouse act adopted by all the states. The state of Indiana now has a law prohibiting the storing of grain for farmers.

ASSOCIATION WORK

On the work of the association Secretary Riddle spoke as follows:

"A year ago the association employed an expert scale inspector and repairman. It was with fear and trembling upon the part of many that a contract was entered into. The members were glad to find that at the close of the first year the service had been self-sustaining. This scale inspection and repair service had accomplished wonders in the way of improving weights and in establishing confidence."

He further stated that he had made a tour of every county in middle Ohio and thereby added seven counties to the association. No formal membership fee was charged but the regular monthly fee of \$2 was to be paid by each elevator operator and mill owner joining the association. As a number of members are continually in arrears in

their monthly payments, in order to guard against a depleted treasury and enable the secretary to receive a reasonable sum as salary, Mr. Riddle recommended that the secretaries of each county local collect six months' dues in advance at the rate of two dollars per month to support the general work of the association. A motion to this effect was made and carried.

THE NEW OHIO SEED LAW

Hon. A. P. Sandles, secretary of the Ohio Department of Agriculture, who was scheduled to talk on Ohio's new seed law, was not present, advising Secretary Riddle that he was unable to get State Attorney Hogan to give an opinion on the law as passed. A general discussion brought out the following facts:

The new Ohio law regulating the sale of seeds of all sorts becomes effective August 10. It provides that any person who has a quantity of seed—10 pounds or more to offer for sale in Ohio—must have the parcels or packages clearly labeled to show the names of seeds, name and address of handler and statement of purity. The measure further provides that:

Agricultural seeds are defined as the seeds of alfalfa, barley, Canadian blue-grass, Kentucky blue-grass, brome (awnless) grass, buckwheat, alsike, clover, crimson clover, red clover, white clover, field corn, kafir corn, meadow fescue, flax, millet, oats, orchard grass, rape, redtop, rye sorghum, timothy and wheat which are to be used in this state for seeding purposes. The seeds of quack grass, Canada thistle, clover and alfalfa dodder and field dodder, ox-rye daisy, are defined as noxious weed seeds. Maximum admixture permissible, one of any or all of such noxious weed seeds to 5,000 seeds of any of the varieties of agricultural seed offered or exposed for sale.

Sand, dirt, chaff, foreign substances, seeds other than those specified in Section 3, broken seed, and all seed not capable of germinating, shall be considered as impurities when present in agricultural seeds sold to be used for seeding purposes, and when such impurities are present in any quantity exceeding the standards of purity provided for in Section 7 then the name and the approximate percentage of each such impurities shall be plainly indicated in such statement as provided for in Section 1 of the act.

Two cents per bushel must be paid into the state treasury as a fee for state inspection.

All persons who reclean seed for a compensation are obliged to destroy or grind in the presence of witnesses all screenings which contained noxious weed seeds.

Selling of seed that does not carry the government stamp makes the seller liable to a fine of from \$25 to \$200. Seedmen are obliged to give the government inspectors free access to all seeds in their warehouse and to allow them to take samples.

Many of the dealers considered this new seed law so drastic that it was impracticable and said that if it was enforced it would drive them out of business. J. W. McCord, however, believed the bill was inoperative as no provision was made in the budget for funds to prosecute any violation of the act.

It was suggested that a resolution be passed by the association asking the state representatives from the various districts to legislate against the said law on account of its impracticability. Mr. J. M. McCullough of J. M. McCullough's Sons Company of Cincinnati, however, advised the association not to take any action at this meeting.

"A new child is born in this bill," said he. "See whether the bill can be enforced. Back of this and all such laws is the intent to promote seed purity. It does not affect any particular individual but rather the state as a whole. What we want is legislation to promote seed purity."

It was advised that after the bill went into effect all packages be stamped "Ohio Standard."

MISLEADING MARKET QUOTATIONS

In opening the discussion on "Misleading Newspaper Market Quotations," Secretary Riddle stated that the Toledo daily papers in publishing these quotations confused the farmer because one journal published the Toledo cash prices and another the Toledo call prices, making a difference of several cents per bushel. It was urged that the Toledo cash price be eliminated and the Toledo call price be published.

E. L. Southworth objected very strenuously to this. "We want the association to forget the matter," he said. "It is necessary to publish the Toledo cash prices as well as the call prices. The cash prices equal the call prices plus the storage prices."

The Toledo daily papers should publish both the Toledo call and the Toledo cash prices."

The association favored Mr. Southworth's suggestion and a motion was made and passed by the association to request the Toledo papers, together with the Associated Press, to publish both prices.

Secretary Riddle read a telegram from D. W. McMillen, who was to talk on "Crop Improvement Work," stating that it was impossible for him to be present.

A vote of thanks was extended by the association to the Toledo Produce Exchange for its kindness in extending the association the use of the 'Change floor, after which the meeting was adjourned.

THE ATTENDANCE

Among those present at the meeting were the following: S. B. Niezer, Niezer & Co., Ft. Wayne, Ind.; S. L. Rice, Metamora, Ohio; J. N. Fritsche, Oak Harbor, Ohio; J. E. Eaton, J. E. Eaton & Son, Grovehill, Ohio; S. C. Bencler, Stryker, Ohio; Eli Short, Elyria, Ohio; L. B. Rawestraw, Napoleon, Ohio; F. H. Fisher, Napoleon, Ohio; C. C. Fisher, Napoleon, Ohio; John Monroe, Archibald, Ohio; C. M. Carpenter, Chicago Junction, Ohio; H. G. Dehring, Curtis, Ohio; J. E. Wells, Quincy, Ohio; W. R. Tabbert, Rockyridge, Ohio; O. G. Lang, Delphos, Ohio; A. M. Courtright, Cecil, Ohio; B. F. Camp, Bowling Green, Ohio; A. J. Odenweller, Ottoville, Ohio; J. C. Bright, McComb, Ohio; W. E. Gest, Defiance Grain & Milling Co., Defiance, Ohio; W. C. Palmer, Jewell Grain Co., Jewell, Ohio; G. E. Bonifield, Napoleon, Ohio; H. T. Burns, Burns Grain Company, Buffalo, N. Y.; C. S. Behymer, Behymer Bros., Rockford, Ohio; E. T. Custenborder, E. T. Custenborder & Co., Sidney, Ohio; E. M. Folsom, Cleveland, Ohio; D. Yarnell, Napoleon, Ohio; W. H. Lambert, Delta, Ohio; J. T. Metzner, Jonestown Grain Company, Tokio, Ohio; J. Nutter, Cecil, Ohio; W. R. Hadnett, W. Crumbaugh & Kuehn Company, Toledo, Ohio; John A. Smith, Toledo, Ohio; J. A. McCaffery, Daniel McCaffery's Sons' Company, Pittsburgh, Pa.; E. H. Baer, Charles England & Co., Baltimore, Md.; C. W. Urmston, Urmston Grain Co., Buffalo, N. Y.; F. R. Moorman, Crumbaugh-Kuehn Co., Toledo, Ohio; Geo. A. Kreagloh, Toledo Field Seed Co., Toledo, Ohio; Geo. C. Rupert, C. Rupert & Sons, Newark, N. Y.; J. W. McCord, secretary Ohio Grain Dealers' Ass'n, Columbus, Ohio; Albert McCullough, J. M. McCullough's Sons Co., Cincinnati, Ohio.

ALFALFA MILLING IN COLORADO

It is but natural that the making of alfalfa meal should keep pace with the growth of alfalfa itself and mills, small and large, have sprung up throughout the leading producing sections, to handle alfalfa

man mill in the distance. All three mills are equipped with up-to-date grinding apparatus and extensive hay carrier systems. The latter average about 500 feet in length at each plant. The power plants are modern in equipment, including gen-

the fact that alfalfa takes up so much moisture from the air. The alfalfa milling process involves breaking through a screen. Moist alfalfa will not break and it is therefore necessary to have dry, well cured alfalfa for good results. These early difficulties



PLANT OF THE DENVER ALFALFA MILLING & PRODUCTS COMPANY, HARTMAN, COL.

erators for electric light and there are deep artesian wells for supplying water.

The progress of alfalfa growing has been phenomenal, when it is considered that twelve years ago it was almost unknown. Kansas and the Southwest were among the first to perceive its many advantages as a forage crop and for enriching the soil in crop rotation. Other states quickly fell in line, Colorado among them and the mills of the Denver Alfalfa Milling & Products Company are a result.

New uses for alfalfa products are being discovered

were soon overcome and the invention of special machinery soon placed alfalfa milling on the plane which it now occupies.

The output of the Denver Milling & Products Company from its three mills last year was 18,000 tons of meal and it is believed that this will be greatly exceeded during 1913. The first cutting alfalfa hay is now in the stack, in prime condition, and the second cutting is reported to be in great shape. All things considered alfalfa millers, in Colorado at any rate, have reason to look forward to tremendous progress during the next few years.

COLLECTION OF CLAIMS UNDER MINNESOTA RATE CASE

The method of collecting claims for excess freight charges under the recent Minnesota Rate Case decision has been announced by the Minnesota Railroad and Warehouse Commission as follows:

Claims may be presented directly to the railway companies or, if the claimant prefers, they may be filed with the Railroad and Warehouse Commission. The Commission suggests, however, that as the claims will be disposed of by the railway companies as near as may be in the order in which they are presented, there would be some saving of time through filing the claims with the companies.

All envelopes should be endorsed, "Minnesota Rate Case." Claimants should bear in mind that if entitled to refund at all, they are clearly entitled to 100 per cent of their just demands, and that it is not necessary for them to employ the services of any one to collect their claims, nor can they profit by doing so. The Railroad and Warehouse Commission announces that it will entertain and give full consideration to and remedy any complaints of undue delay in the settlement of claims.

According to an Iowa agricultural expert the farmers of Black Hawk County in that state lost \$120,000 last year by oat smut.

It will cost approximately \$1,470,000 less to ship the 1913 Montana grain crop to market as a result of the new schedule of grain freight rates agreed upon between the Montana Railroad Commission and the railroads operating in this state. The general average reduction is 4.1 cents per hundred pounds, and the Commission estimates the season's crop at 65,177,000 bushels.



FIELD OF ALFALFA WITH HARTMAN MILL IN THE DISTANCE

exclusively. One of the most representative companies in the alfalfa milling business is the Denver Alfalfa Milling & Products Company which operates three plants in the Arkansas Valley of Colorado.

These mills are located at Hartman, Bristo¹ and Wiley, Col., the Hartman plant being shown in one of the illustrations. The other view shows a field of alfalfa owned by the company with the Hart-

every day. As a poultry food alone or as a feed mixed with corn chops it has given excellent results. It is even beginning to be exploited as a food for human consumption, chiefly for its medicinal value.

The first large alfalfa mill was erected in Omaha, Neb., in 1906, and other mills followed in quick succession. Unfortunately many of these early mills met with disaster owing to poor location and also

Annual Meeting of Michigan Dealers

Convention at Flint Is Well Attended—Affiliation with National Association Deferred—
Advantages of Organization Discussed—Billing Shipments—Buying Hay
and Straw on Grades—New Set of Officers Elected

The fifth annual convention of the Michigan Hay and Grain Dealers' Association at Flint, Mich., on July 30 and 31, proved a magnet which drew a large crowd of grain men. There were about 200 delegates and visitors present when President Charles Wolohan called the first session to order at 10:30 o'clock Wednesday morning, in one of the large rooms of the County Court House.

After a few preliminary remarks in which the members were urged to enter into the discussions and assist in putting the organization on a stronger basis, President Wolohan introduced Hon. C. S. Mott, mayor of Flint, who delivered a brief address of welcome to the visiting delegates on behalf of the city. Secretary M. G. Ewer made an able response for the association, after which the roll was called and the minutes of the previous meeting were read.

President Wolohan then delivered his annual address, which was comparatively short, dealing with the work of the association during the year and the problems which are confronting it.

REPORT OF SECRETARY

Secretary Ewer followed with his annual report, which was, in part, as follows:

I took up the work of this association September 1, 1912, with a membership of 63 resident and 12 non-resident members of the old Michigan Hay Association, who held their convention at Saginaw, August 15, 1912, at which meeting the association was reorganized under the name of the Michigan Hay and Grain Dealers' Association. Dues were increased from \$3 to \$5 per membership after August 15.

The books show that the above 75 members were allowed to pay their dues on the old basis of \$3 per member, making total receipts on August 15 of \$225. Of this amount \$197.50 was used in paying off the indebtedness of the old association, leaving a balance of \$27.50. To this amount was added the dues of the Bad Axe Grain Company of \$5, making a total on hand of \$32.50 and which was intact up to May 12, 1913, at which time I drew on this fund the amount of \$25.35, leaving a balance of \$7.15 in the treasury and which is still on hand.

It will be seen from this report that at the time I took up the work the association was without funds, and in order to get matters under way, our president, Mr. Wolohan, loaned the association \$100, which was placed in my hands and which was used to best advantage possible, but as you must know, far inadequate to carry on the work, making it necessary for me to secure additional funds and which I did do, taking a chance on being reimbursed through building up a large organization.

The following report shows that I secured 73 resident and 13 non-resident members, which added to the 75 members of the old association, gives us a total of 136 resident and 30 non-resident members, a total of 166 members on July 29. Of this number, I secured 91 members who paid dues of \$5 per member or total of \$455. This amount, added to the Wolohan loan of \$100, gave us total receipts of \$555, not a very large sum to carry on the work of an association of this kind. Our total disbursements amount to \$620, or \$65.30 in excess of our receipts.

In submitting this report, I wish to call your attention to the magnitude and importance of the hay and grain business in Michigan and the necessity of having a large association, same as Ohio, Indiana, Illinois, Missouri, Iowa, Texas, Oklahoma and Kansas, and which we can have under proper organization with sufficient dues to furnish a working capital to carry on the work. Some of the state associations just mentioned spend more in postage than the total amount we have received, but they are doing things because they have the money to do them with. This association business is no boy's play. It takes real money same as any other line of business, and these associations get the money.

After the report was read a committee of three was appointed by the president to audit the financial statement included in the report and the report itself, was upon motion, approved by the association.

THE HAY SITUATION

H. G. Morgan of Pittsburgh was called upon to talk on the hay situation from observations taken in his recent trip through the hay section of the United States and Canada. In the course of his remarks Mr. Morgan also called attention to the hay situation abroad, having made a recent visit

to England and Scotland. He spoke, in part, as follows:

"When I visited England and Scotland recently they were engaged in what was called a farmers' strike, being in the midst of a bounteous hay harvest which averaged, I should say, three tons to the acre. Where in the past England depended upon the United States for a good supply of hay, there will be little demand for this product from this country this year.

"From my observations Ohio will have an 80 per cent crop, with 20 per cent timothy and the balance clover and clover mixed; Indiana will have a poor hay yield on account of the drought; Iowa and Wisconsin a good crop; Michigan 25 to 80 per cent crop; New York 80 per cent crop with fair quality. I saw a good supply of hay in Quebec and western Ontario, although Canada will be short for general needs. On the whole I expect a fair yield for the year.

"As to prices, Boston is now paying \$18 to \$19, New York \$20 and Pittsburgh \$15 to \$16. While



SECRETARY M. G. EWER
Detroit, Mich.

we expect to pay a fair price for hay, there will be no \$30 hay this year. When large mercantile houses are replacing their horse-drawn wagons with motor-driven vehicles—Wanamaker alone having reduced equipment from 400 to 75 horses—it is bound to lessen the demand for hay. There will be no scarcity in the hay business this year. There will be plenty of hay, and I advise hay dealers to go slowly."

Adjournment was then taken for luncheon.

WEDNESDAY AFTERNOON SESSION

John F. Courcier, secretary of the Grain Dealers' National Association, opened the afternoon's proceedings with an interesting address upon "Organization—Why It Pays."

This address was followed by a brief talk by John L. Dexter of Detroit, who thoroughly endorsed organization work, believing it the only means of putting the hay and grain business in the State of Michigan on a sound and paying basis.

President Wolohan then introduced J. Vinings Taylor, secretary of the National Hay Association, who gave an address along the same general lines as the previous speakers, setting forth the inestimable value of organization in any enterprise.

T. P. Riddle, secretary of the Tri-State Grain Pro-

ducers' and Dealers' Association, was next called upon and he responded in part as follows:

"Recently I saw a motto posted in a public place which read, 'Don't smoke; remember the Iroquois Fire.' Another motto nearby read, 'Don't spit; remember the Johnstown Flood.' This suggests a motto for you members which is, 'Don't scrap; remember the failures in the hay and grain business.'"

"Competition is a badly misused term and means waste, loss of life and destruction. Co-operation means life, harmony and satisfaction. The anti-trust laws of the United States are not intended to prevent co-operation. Co-operation in maintaining uniform prices and practices is necessary in placing the hay and grain business on a sound basis."

Mr. Riddle also reviewed the work done in his association and its division into county locals, with a secretary appointed for each local, who reports to the head secretary relative to the work accomplished at the local weekly meetings.

It was announced that C. J. De Roo, of the Peninsula Milling Company of Flint had invited the visitors to be his guest at the ball game played between Flint and Jackson teams that afternoon. This was enthusiastically accepted.

For the evening entertainment W. H. Sturgis of J. P. Burroughs & Son, Flint, Mich., invited the members to a theater party at the Orpheum Theater, followed by a luncheon at the Elks' Club.

The meeting adjourned for the day and a rush was made for the ball grounds.

THURSDAY MORNING SESSION

After making an inspection of the Buick motor plant at the invitation of the Board of Commerce Committee, who had provided automobiles and special trolley cars for the members, the trip consuming the early part of Thursday forenoon, the second day's session was called to order. Before continuing the program, a Nominating Committee was appointed by the president consisting of the following: E. C. Forrest, J. W. Marks, H. J. Hudson, D. Mansfield and W. H. Cronin.

ADDRESS ON "HOW TO BILL SHIPMENTS"

H. F. Goemann, of Toledo, followed with an address on "How to Bill Shipments to Hold Carriers Responsible for Same," in which he stated that it was customary among millers, grain and feed dealers to ship as an accommodation to their customers a bill of goods to the order of the receiver, the bill of lading showing the consignee as the shipper or owner to notify a third party.

"Your identity as the owner and shipper of the goods should not be lost," he said. "Bill the goods from yourself to notify a third party and get the full assurance that the shipment is yours until the bill of lading is surrendered by paying the draft. Neither is there enough care taken in making out the bills of lading. The writing should be plain, the car number and initials be clearly written and in their proper places and signed by the railroad agent or his deputy. Never should rubber stamps be used. Be as careful in filling out a bill of lading as you are with a check or note."

Mr. Goemann also spoke of the Pomerene Bill, which will govern bills of lading, expressing the extreme advisability of its adoption by Congress at the coming session, it being already adopted by sixteen states. This bill will make a bill of lading have the same effect in law as a check or draft. He claimed that a railroad agent had no authority to sign a bill of lading unless especially elected or appointed to do so by the railroad company, the shipper having no protection according to the present arrangement.

Mr. Goemann urged that a resolution be passed by the association, which was later done, supporting the Pomerene Bill, and that each member request the congressman from his district to support the bill.

THE RYE OUTLOOK

The rye situation was also discussed by Mr. Goemann who explained that there were prospects for a large crop, the government report showing a larger acreage and prospective yield than last year. Wisconsin, North and South Dakota, Montana, In-

diana and Michigan showed an increased production, which would of course bring the price down to an export basis. He also said that rye and buckwheat were on the free list and that imports might make the price lower.

Another thing that he believed would force the price down was that the banks in the large cities had notified their patrons that a money shortage was expected and that that condition might also curtail the manufacture of whiskey, for which rye is largely used. A prospective failure of the Michigan corn crop might force the price of corn up so that the price of rye might be below the cost of corn and considerable rye might be used for feed.

G. A. Heath of Lenox, representing the Committee on By-Laws, submitted a new set of by-laws, which were adopted as read.

BUYING HAY AND STRAW

W. H. Sturgis, of J. P. Burroughs & Son, of Flint, Mich., addressed the association on the topic of "Buying Hay and Straw," in part, as follows:

We are now living in a time that is so far removed from a decade ago that there is very little if any comparison. Systems employed 10, 20 or 30 years ago, while no doubt could have been improved upon then, did suffice at that time, but today will not do at all. This is just as true of other things as it is of the hay business and equally true of the hay business as of anything else.

Farmers as a class are good progressive fellows—they like modern and progressive methods. Look at the farmer of today and compare him with the farmer of 25 years ago. Why, the farmer of today is so far in advance of the farmer of a few years ago that we would scarcely recognize one by the other. See the advance steps taken by the farmer the past few years in most all branches of farming, look at the scientific research, to not only increase production, but improve quality of the wheat, the corn, the fruit and the vegetables on the farm. True it is that we hear a little about improving the quality and increasing the quantity of hay, but no one can say but this has been the most neglected branch of farm industry. And why? Because the hay dealers of the country have been so slack in their methods of conducting the business, they have not demanded anything better, but, on the other hand, they apparently have been satisfied with what they got and satisfied to drift along in the "good old way," buying this hay by guess, "Mow or Stack Run," paying one price for good, bad and indifferent, guessing that it will come out right some way, and when they realize their disappointment and find they guessed wrong, load it in a car hoping it will come out right somewhere, only to realize their final disappointment and take their loss when the hay reaches destination.

Let us cease this antiquated method of trying to conduct the business. Let us use every effort to raise the standard from the dealers' standpoint and so encourage the farmer to raise the standard of the farm.

Drawing a Parallel with Wheat.

What would you think of a grain dealer who would go to a farmer's barn to buy wheat? The farmer has a large bin of wheat that looks fine and you ask him if it is all the same, and he says, "Why, yes; about the same," or "I had one field that had rye in, but it's pretty good wheat." So you buy this wheat at one price, guessing how much will be rye mixed when he delivers it. You find a lot of rye mixture, but you try to keep it separate. Some gets in with the good wheat and you get soaked.

Now, first, the farmer would not put his good and bad wheat together. Why? Because he has been educated along this line and knows that it will make it all off-grade and lose him money; but this is exactly what he does with his hay, and we fellows take it all at one price. Do you expect to ever educate and encourage the farmer to raise the standard of his hay so long as we continue the present policy of buying? No, never. Then let us begin on the crop of 1913 to buy hay of the farmer after it is baled and buy it strictly on grade.

Look at the wool business, for instance. A few years ago it was a common practice for the farmer to tie his wool with sisal twine or anything else. What happened? The eastern dealers made a ruling refusing to take wool tied with sisal twine, only at a discount. That stopped the tying of wool with sisal. Oh, yes; many reforms have been made, and I believe there is no good reason why some should not come in the hay business.

Some I have talked with say, "Yes, we need these reforms, but you can't do it." The farmer isn't used to this and that, and "My competitors won't do it." Well, if there is a better way—and there is—let's get the farmer used to it, and once the farmer gets used to up-to-date methods, he won't want to trade with the man so much behind the times.

Opposition to All Reforms.

The fellow who says "It can't be done" hardly belongs to this age; in fact, "can't's" never accomplished much in any age. It is not so many years ago that wheat was bought "farm run," and I supposed some said, "You can't clean wheat from the farmer; he won't stand for it." But he did. A little later another inno-

vation came and we began buying wheat on test weights. Probably some then said, "The farmer won't stand it." I believe there was some opposition, but he stood it. Later Michigan became a bean growing state and the business was started about on the same basis as we are still continuing the hay business—without system—and one man would guess one thing and another something else, until someone started buying beans on a system and testing them to arrive at their true value. Yes, the farmer "stood for this." Later the Reardon Schedule was inaugurated and generally accepted, and still the farmer "stood for this." Now, as a matter of fact, it is not a case of the farmer standing for anything. It is just this: that a just and equitable basis and system be adopted for the buying of hay, one which is not asking anyone to "stand" for anything, but one that will give everyone his due. Is there anything unreasonable in this? Is there anything unfair? On the other hand, does anyone think it is just or fair to buy one man's hay at \$10 per ton and it all turns out No. 1; buy the next man's hay at \$10 and half bales out No. 1, 25 per cent No. 2 and perhaps the other 25 per cent no grade? Is this fair to anyone? No, it is not only unfair and unjust to the buyer; it is unfair to the man who had all No. 2 and unjust to the other man.

Now, another excuse for not buying hay on the grade is, that farmers don't know grades and it will cause dissatisfaction. If they don't they will soon learn, and if they can't learn, better stop growing hay for market. Educate the farmer. Make it an incentive to produce better hay. Raise the standard of Michigan farming. Raise the standard of the hay business. Raise the standard of Michigan hay, and buy hay right.

Upon motion a resolution was passed requesting all members of the association to buy hay on the grades established by the National Hay Association.

This was followed by a discussion on the New York state law making balers responsible for tag weights on hay they baled, explaining that each bale had to have a tag attached giving the name of the baler and the weight of the bale. It was urged that the association try to procure such a law in Michigan, declaring that there was no reason why it should not be passed if the association demanded it.

A. W. Cutler, of Adrian, requested that before taking up any further topics as scheduled the association decide what to do with the deficit now in the treasury as shown by Secretary Ewer's report.

"Sixty members at the present time," he said, "have paid their regular dues. What about the rest of them? There are 600 shippers in the state of Michigan who should join the association and derive the benefits of it. Should the association disband or continue? It can't run long as it has done in the past."

H. G. Morgan said that these organizations were not only of a great benefit to the shippers, but also to railways at the terminal markets, who when

placing the dues for both resident and non-resident members at \$5 a year, which was carried.

J. F. Courcier having previously put in a request asking the association to affiliate with the Grain Dealers' National Association withdrew same as no provision for an increase in dues was made.

ELECTION OF OFFICERS

The Nominating Committee then submitted the following names for officers for the ensuing year: President—F. E. Nowlin, Albion.

First Vice President—A. W. Cutler, Adrian.

Second Vice President—A. E. Stuart, Chesaning.

Treasurer—Albert Todd, Owosso.

Directors—S. H. Barlow, Crosswell; F. M. Houghton, Chio; Frank Bloomer, St. Johns; C. R. Huston, Detroit; James Kerr, Melvin.

The report was accepted and the officers were declared elected.

President-elect Nowlin took the chair and sincerely thanked the association for the honor conferred upon him. He gave the assurance that he would give his best efforts to put the association on a sound basis, and asked the members for their co-operation. Michigan ranking as one of the foremost agricultural states in the Union, it ought to support a hay and grain association equal to that of its border states.

A discussion on the matter of the formulating of plans for strengthening this association was then started. T. P. Riddle stated that the only method he could suggest to get any results was to adopt a plan similar to his organization, which was divided up into county locals, for which secretaries were appointed, who held weekly meetings during which current topics were discussed. The work of these secretaries also included securing new members, and reports were regularly made to the head secretary showing the work done and the condition of the various locals.

A motion was made by A. W. Cutler that the president and Board of Directors be instructed by the association to proceed with the organization of county locals after the plan of the Tri-State Grain Producers' and Dealers' Association, and that they confer with Secretary Riddle in the organization of these locals.

The motion was carried, after which the meeting adjourned *sine die*.

PARENT AND CHILD

Situated almost a stone's throw from each other, the two elevators shown in the accompanying illustration, both owned by E. P. Armstrong & Son of



THE TWO GRAIN ELEVATORS OF E. P. ARMSTRONG & SON, PARNELL, ILL.

these meetings are held can attend and meet a large number of shippers within a day or two which otherwise would take them weeks to accomplish. He therefore urged a solution of the problem and a continuation of the association, and made a motion to increase the dues of resident members to \$5 and non-resident members to \$10.

W. H. Sturgis offered an amendment to make the dues \$10 for resident members and \$15 to non-resident members. Many of the members were in favor of increasing the annual membership fee, and others declared they were unwilling to pay more unless there was some definite plan of work arranged that would bring results with the increase.

A motion was then made by G. A. Heath,

Parnell, Ill., might well be termed "parent and child." The steady growth of their business, forced this firm to erect a new elevator last summer, which is seen in the background and this elevator is now being operated in connection with the original one. It is not such a small child either, for it has a capacity of 20,000 bushels as compared with 30,000 bushels for the larger elevator.

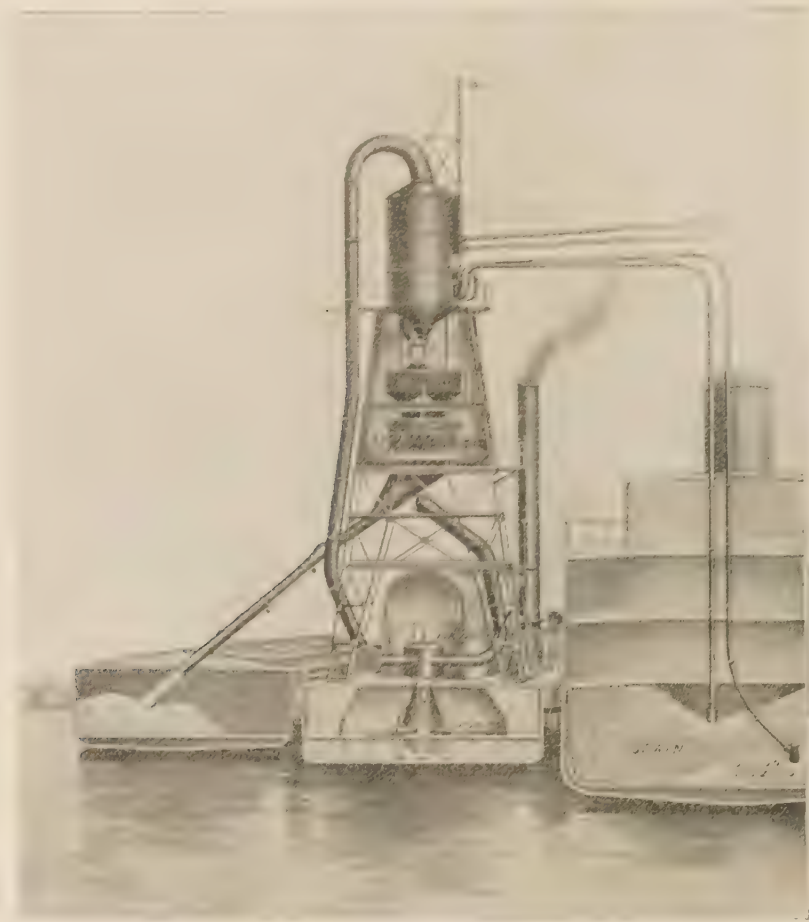
The new elevator is thoroughly modern in every respect and is equipped with a man lift, hopper scale and hopper wagon scale. All the machinery is run by an 8-horsepower gas engine.

The older elevator, seen in the center of the picture, has had a number of repairs during the last year so that both elevators are practically on a par

with reference to handling facilities and equipment. In the big elevator there is a car loader for oats and a gravity spout for corn. A 20-horsepower gas engine furnishes the power. Together with the other elevator there is a total capacity of 50,000 bushels available. Parnell, where the elevators are located, is on the main line of the Illinois Central Railroad and is in the center of a great crop growing country. The two elevators handle about 400,000 bushels of grain annually.

A NEW FLOATING PNEUMATIC ELEVATOR

There has recently been put into service at Emden, Germany, which is a port on the North Sea at the mouth of the River Ems, a floating pneumatic grain elevator, which has many interesting and novel features. It was built by a Dresden construction firm for the Elevator Gesellschaft of Emden and is shown in the accompanying illustration.



VIEW OF NEW FLOATING PNEUMATIC GRAIN ELEVATOR AT EMDEN, GERMANY

As described by the *Scientific American*, the elevator consists of a floating iron pontoon in which there are divisions for boiler and engine installations, together with living, kitchen and lavatory accommodation for the staff, and ample storage room for materials.

The machinery installation in the pontoon consists of one compound vertical steam engine, connected with the necessary air pumps of vertical type to which they are direct coupled. The speed of the steam engine can be varied even when running by means of a hand wheel and regulator on the shaft. In the same room as the steam engine for driving the pumps are the condensation apparatus, the pumps and a special engine for the production of light and power, which is also of vertical type and direct coupled. There is also a third steam engine with a belt drive for a small dynamo to produce electric energy for power purposes. The engines, pumps and gears receive their steam from the boiler, arranged close to the engine-room. To the left and the right of the boiler-room are the coal stores and the water tank from which the boilers are fed.

Above the engine-room is the iron mast which carries the pneumatic transport apparatus and weighing machines. A portion of this mast is cov-

ered with sheet iron and is provided with staircase, platform, windows, doors, etc., and the whole is well fixed to the floating pontoon. On the top of the tower, at the platform level, are placed the receiver and discharger of the transport installation, and to these are connected four carrying tubes which are made movable both vertically and horizontally, and are fitted at the ends with suction nozzles so that the amount of air carried up with the grain can be regulated to a nicety. Pipes are then led from the receiver to the pumps and air vessel, which are fixed on the side of the tower.

To meet delays which might occur during weighing operations or by disturbances in the air lock, there are provided inlet valves as well as automatic safety valves, arranged in the air tubing and air chamber, which come into operation when the normal working pressure is exceeded. In the air chamber is also an arrangement to prevent grain being carried over into the same. To prevent any

dust entering these there is arranged in the interior of the receiver and discharger a patent dust-collecting arrangement. This separates the dust from the grain, and allows them to mix only after the latter has passed through the vacuum chamber of the receiver. A special advantage of this arrangement is that complicated cloth or water filters are avoided, and thus there is great saving of space and labor.

The whole installation is very simple and entirely automatic. Below the receiver is the discharging device, which is adjustable and driven by an electric motor. The current is regulated by a switch-gear, set at a specified resistance, and if this is exceeded (which happens under abnormal conditions) the power is automatically switched off so that both discharger and motor stop working. Beneath the discharging device an iron hopper is arranged with a double slide, from which the grain is fed into an automatic weigher. Thence the grain is brought into another hopper and then by means of telescopic tubing it is discharged into small boats.

The plant is arranged to take a sacking machine of a capacity of 50 tons per hour, and will empty steamers and load lighters (in bulk) at the rate of 120 tons in the same time. In all working and living compartments of the elevator, electric lighting

and steam heating are provided, and the signaling arrangements for communicating between the different working positions are specially designed.

SEVERAL RECENT DISCOVERIES

BY N. L. WILLET.

In medicine, electricity and chemistry the term "Discovery" is in largest use. We mean by it something that is startling and new. The grain producer or dealer, however, rarely uses the term, although agriculture is as full of discoveries as are the sciences above mentioned; and as regards value, an agricultural discovery may be well nigh priceless.

The discovery of phosphate beds in the South, at the end of the Civil War, when southern fields were depleted and when there were no cattle left to supply manure, was an invaluable discovery. Priceless, too, were those other discoveries in the South, that common cotton seed, at one time thrown in rivers to keep cattle from eating it, contained most nutritious and edible food-meal and food-oil.

Similar discoveries are going on all the time. It is only the wide awake producer, one who reads a large amount of literature, who at all keeps up with the history of his calling. That was a great discovery when an early ninety-day cotton was found, in the mountains of North Carolina. A similar great discovery was the Williamson method of growing corn. A recent discovery is that an unfertile egg will keep longer than a fertile egg.

Several recent things discovered in the South concerning cowpeas and velvet beans are worth the telling—and the reading. In the two-crop-per-year system of the South, the cowpea for hay and forage, is planted after grains and is of inestimable value. A legume, it requires no manure on poor land, and is so soil enriching that the succeeding crop does well with only an acid phosphate guano. Its hay equals alfalfa, but it is difficult to cure and in bad weather the hay is often spoiled.

Now the discovery referred to is this: Plant to one acre, one bushel of cow peas, and $\frac{1}{2}$ bushel of soy beans. The soys are upright and hold up the cowpeas; the mixed hay on them is more than cowpeas alone; it is more easily and safely cured. The hay out-turn is not a part ration but a complete ration—the beans furnishing the protein needed. This seems a very simple story but the cowpea is such a universal crop in the south that a better method of culture is a matter of the greatest importance.

The velvet bean is our rankest legume—in vine and root system. It runs 15 to 20 feet and may run 40 feet. When introduced into the United States, it was tried out for hay purposes. It was a failure; the cutting and curing were almost impossibilities. Then velvet beans had a rest. After this came four discoveries, now largely adopted in the South Atlantic and Gulf States:

First.—The planting in knee high corn, between hills, of velvet beans. These climb over the corn but do not interfere with corn-ear gathering. In the fall the bean forage—vines and beans—can be grazed through the winter, or in January the whole output can be turned under. Following crops are increased 25 to 35 per cent.

Second.—The planting on land too poor for corn production, of velvet beans with sufficient corn to hold up beans. Let cattle graze on it all winter and then turn under. Florida and Southern Georgia have become large growers and shippers of cattle and hogs by adoption of this method.

Third.—The planting of velvet beans solely for soil enrichment on poor, unproductive and unused lands—turning the vines under in mid-winter. Poor lands by this method have been made to produce quite well.

Fourth.—The adoption for soil enrichment by Louisiana sugar planters of velvet beans in place of cowpeas. Louisiana, in her cane fields, plans enormous amounts yearly of cowpeas. But the Louisiana planters have found that velvet beans produce the larger amount of vines to turn under and that the seed acreage cost too, is less.

In the South, cowpeas, soy beans and velvet beans

all take the same rate of freight—an especially low "D" rate. This low rate, for three splendid legume seeds is in itself an incentive for this planting.

INVESTIGATING BUFFALO EXPLOSION

Witnesses at the inquiry held in the City Court of Buffalo, to fix the cause of the Husted Milling and Elevator Company disaster developed a number of theories but nothing definite was proved. Sydney T. Wilson, state factory inspector, testified that the company had complied with every recommendation, relative to safety appliances in its plant, made by the state factory department. He also said that he talked to 27 men injured in the explosion and was unable to learn from them anything which would determine what started the explosion.

Important testimony was given by John W. Helvey, an oiler, who said that bearings in the basement were hot every day, sometimes to such a degree that the oil surrounding them burst into flames, and that a constant stream of water had to be played on the bearings. Other evidence submitted, however, seemed to point to the first blast coming from other directions than where the machinery was located. Several important witnesses were in the hospital and it was decided to postpone the investigation until August 22.

ATLANTIC COAST'S BIGGEST ELEVATOR NEARING COMPLETION

BY E. R. SIEWERS.

It has finally been officially announced that the big modern grain elevator at Girard Point, Philadelphia, now being pushed toward completion, will be ready for business on March 15, 1914. The Pennsylvania railroad authorities are determined that this new export grain elevator will be not only the largest, but the best equipped plant of its kind along the entire Atlantic seaboard. It is spoken of continuously as the million dollar grain elevator, but the entire cost with the adjuncts will easily foot up to \$1,250,000, and possibly a trifle more. Great headway has already been made, although its present condition is only a network of steel, other metals and concrete, and to give a full and correct representation of it in its present condition requires the most skillful ingenuity of the illustrative process.

It is calculated to be absolutely fireproof, as even all the apertures have metal casings, which are covered with the finest nettings of steel wire. Its full capacity for holding grain will be absolutely 1,100,000 bushels, and that item in itself means great future business in the export line for the port of Philadelphia. In the preparation of the foundation no less than 6,000 piles were driven into rock bottom by ponderous machines, each stick of timber representing the pick of the southern forests, of full growth and in length averaging 60 feet. This part

of the work required the greatest care and the most substantial and correct workmanship, in order to avoid future dangers from settling of the immense storage place.

To go into details of this mammoth grain establishment would fill the columns of an ordinary journal, but sufficient for present purposes. Just a few of the leading features of this gigantic concern will be referred to. While the main structure is moving upward at the rate of about four feet per day, the annex to the elevators proper is being looked after, which will include 54 cylindrical bins of huge size, in addition to the 40 angular bins for

Then there are the track sheds and switchboards and various electrical devices that will be almost human and automatically give warning and information. James Stewart & Company of Chicago are going all the construction work.

TESTING SEED CORN IN IOWA

During the past few years the Agricultural Experiment Station at Ames, Iowa, has been devoting a great deal of attention to the germination test of seed corn, principally with reference to whether a carefully read germination test gives a true indica-



PART OF THE AGRICULTURAL EXPERIMENT STATION FIELDS AT AMES, IOWA
The Plots Marked Off by a Black Line Are Planted with Corn Used in Germination Tests.

holding grain. The concrete pier to support the gallery is now finished, and is 438 feet long by 25 feet wide, widening out in the channel to 500 feet, where the big steamships will take in their cargoes. The gallery will be operated by four belts, and in this connection a freight yard sufficient to accommodate 250 modern freight cars will be built.

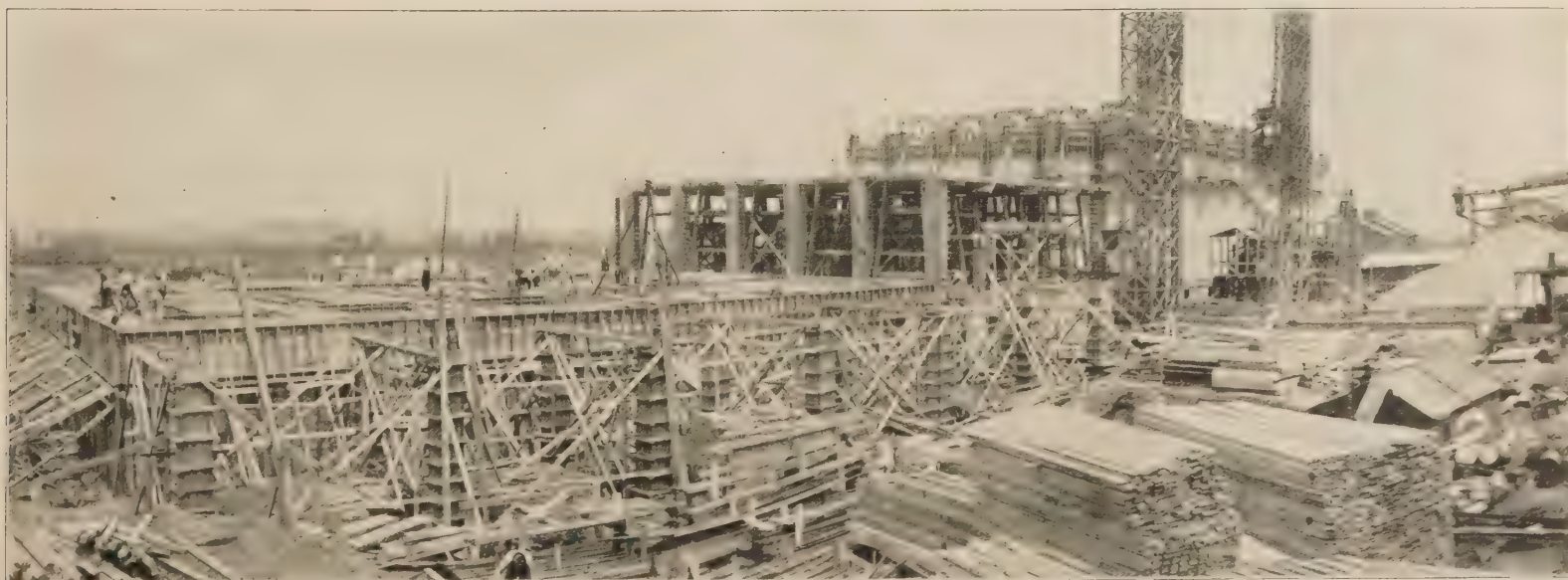
Each one of the enormous grain cylinders, which are 15 feet in diameter, will rise to the height of 202 feet, the total elevator area being 300 by 150 feet. The cleaning, curing and drying apparatus is located next to the storage annex. Each storage cylinder can accommodate easily 13,000 bushels of grain, and the capacity of the annex will be 870,000 bushels and upwards. The hourly shipping complement will be 60,000 bushels. Electricity will be utilized in the working of the great plant. A conveyor gallery is to be erected connecting the elevator with the pier, a distance of about 838 feet, making it possible to load three vessels with grain at one time. In the work-house will be 24 circular bins and 24 angular bins. The modern drying equipment will put in good condition 3,000 bushels of grain per hour.

tion of the comparative yielding power of individual ears. The complete summary of the tests is included in tabular form in a recent bulletin issued by the Experiment Station.

Many first class ears of seed corn were received and tested in every standard tester now on the market, in addition to various home-made kinds. The results showed some idea of the comparative value of the different testers. Six grains from each ear were tested and classified as strong, weak or dead. Thus an ear testing 6-0-0 was regarded as perfect while one testing 2-2-2 was medium and one 0-0-6 was dead.

Each of the individual ears on which one or two kernels showed vitality were planted in separate plots, in the area shown in the accompanying illustration. The average of some 45,000 ear corn tests made in this manner during 1910 and 1911 demonstrated beyond question that a careful germination test gives a true indication of the comparative yielding power. It was also proved that no other practice will give so great returns in dollars and cents as seed corn testing.

The cost per acre of testing all the seed ears used



PRESENT APPEARANCE OF GIRARD POINT ELEVATOR OF THE PENNSYLVANIA RAILROAD AT PHILADELPHIA

in this experiment in 1910 was 35 cents and in 1911, 16.3 cents. The untested corn in 1910 gave a stand of 50.5 per cent and a yield of 55.5 bushels per acre; the ears which tested 6-0-0 in 1910 gave a stand of 72.3 per cent and a yield of 75.1 bushels, a gain of 21.8 per cent in stand and 19.6 bushels in yield. In 1911, the untested seed gave a stand of 52 per cent and yielded 35.6 bushels per acre, while the ears

testing 6-0-0 gave a stand of 73.9 per cent and a yield of 45.7 bushels, a gain of 21.6 per cent in stand and 10.1 bushels in yield. The average stand for the two years of untested seed was 51.25 per cent; of the tested, 73.1 per cent; the average yield of the untested seed was 45.5 bushels per acre, of the tested, 60.4. Therefore, testing gave an average increase of 21.85 per cent in stand and of 14.9 bushels in yield.

Grain Exchanges and Their Opponents

Separating the Honest Antagonists from the Purely Disgruntled—General Ignorance Regarding Exchanges—A Review of the Early History of the Chicago Board of Trade—The Pioneer Settlers and Their Crops

By JULIAN KUNE

In a previous article the writer referred to a certain class of disgruntled individuals who, as soon as Dame Fortune turns her back to them in their speculations on a Board of Trade, at once become its most implacable enemies, and pose before the world as "holier than thou" individuals.

I shall refer now to another class, who through ignorance are misled by the general and periodical crusade and outcry against grain exchanges which deal, according to the general belief, in the necessities of life.

If you should ask these people what, in their opinion, are the necessities of life, they would tell you that they are the various grains raised on the farms and the live stock and its products. They cannot comprehend the fact that outside of the few luxuries, which only the more opulent can afford, all commodities which are produced on the farm or are being manufactured, are in reality "necessaries of life," for our present civilization tends to make them so.

Cotton, flax, wool and leather, for instance, have become as much a necessity for man's body as the food which he consumes. The requirements of our present age makes it incumbent upon civilized man to clothe himself properly as well as to satisfy his hunger, but no one ever thinks of attacking the merchant who buys and sells for future delivery any of the above named raw materials or their products. Cotton is the only raw material in which the forestalling of the market is sometimes attempted, but like in most other instances, the individuals running the corner get themselves cornered. During a long experience on the Chicago Board of Trade, I remember but two or three corners which ended successfully to the parties initiating them. All the other attempts were dismal failures.

This second class of persons referred to are honest enough in their antagonism against exchanges, all they need being enlightenment on the subject. None but those subject to blind and unreasonable prejudices refuse to be enlightened on any subject of which they entertain an erroneous opinion, and as soon as they have discerned the truth about a matter, their opinion changes.

A recent episode in connection with Chicago Board of Trade matters well illustrates the correctness of the foregoing statement. A serious charge of an attempt to corrupt members of our legislature was recently made. While this charge remained unrefuted, the public began to wonder whether there was not some cause for its existence; but as soon as the case had been examined by a legislative committee, which exonerated the Board of Trade, the same public indignantly refused to be misled by these charges and at once became convinced that there was no foundation in them.

It was found that the members of the Board had subscribed a certain amount of money wherewith to carry on a campaign in furthering the passage of a law which would legalize the trading in "Puts and Calls," but a thorough investigation by the committee could not find that any corrupt means had been used to have such a state law passed. It was proven that the \$5,000 subscribed by the various members of the Board was legitimately used for running expenses, to cover railroad fare, printing

explanatory circulars which were scattered all over the state, and other like expenses.

It is a well known fact that when the Chicago Board of Trade undertakes to do anything in that line it goes into it with a push and will that has become proverbial. It is further a well known fact that there is no organized body, either commercial or philanthropic, whose members respond more promptly to a subscription list in behalf of a worthy cause than do the members of the Chicago Board of Trade. Its reputation for spontaneous liberality, although antedating our Civil War period, reached its highest level during that time, when at its own expense it organized two batteries of artillery and three regiments of infantry and sent them fully equipped to the seat of war.

No matter whence comes the appeal for aid, the Chicago Board of Trade is always among the very first to respond. This leads me back to the time when, in 1879, when a destructive flood almost wiped out Szegedin, a town in Hungary, there was collected on the Board about \$3,000 within the short time of less than two days. Men like P. D. Armour, B. P. Hutchinson and Nelson Morris headed the subscription list with \$100 each. During the recent floods in our country the Chicago Board of Trade was as usual in the front rank with its subscription.

This spontaneous liberality has become a second nature through the long practice, that dates back to the middle of the last century. Never was there an appeal refused, whether it came from the far West, whose dwellers were made homeless by tornadoes and cyclones, or from the starving millions in Russia or China. All felt the cheering and timely aid sent to them by the Chicago Board of Trade.

From the above encomiums which I bestow on the Board it must not be inferred that all those who belong to the organization are angels and faultless, but it must be claimed that as a body it is an exemplary organization, that it fosters upright and honest dealing between man and man, and that through its iron bound strict rules, it compels members, who may lack the conception of a high moral standard, to behave themselves, or else they are obliged to quit.

Long before the Chicago Board of Trade was legally organized, the spirit of fairness and justice was the governing principle which actuated its pioneer members. It did not require state laws and regulations to define what is right and what is wrong in commercial intercourse and limit to their observance men like William B. Ogden (Chicago's first mayor in 1837), A. H. Burley, Thomas Hale, E. H. Haddock and Julian Rumsey and others who formed themselves into an association without any charter, for the purpose of "avoiding trouble and vexation, and to facilitate mercantile transactions" as suggested by "Merchant" in a letter written in 1845 to the *Daily American*, calling upon the residents of the rapidly growing city to form a Board of Trade. It is these ethics and the high sense of moral rectitude of the pioneer founders of the Chicago Board of Trade that have been faithfully retained and practiced by its succeeding chartered organization.

Of one thing we may be sure, and that is, no amount of repressive measures, which the enemies of the Chicago Board of Trade and other grain ex-

changes may be able to induce legislatures or Congress to adopt, will turn back the wheels of progress, and force the present generation to re-adopt the commercial methods of a hundred years ago. The present methods of merchandising, either in cereals or other commodities, are as necessary and indispensable as are railroads, telegraphic and telephone communications and many other handmaids of our present civilization. To abolish Board of Trades and kindred organizations, and substitute other means of handling the immense grain crops of the world, would cause the same chaotic state in agriculture and in the manifold industries depending on it as would the destruction and abolishment of steamships, railroads, telegraphs and telephones, and revert back to the time when all these progressive appliances, which brought to mankind innumerable conveniences and comforts, were unknown.

The present generation is utterly unable to conceive the hardships which the pioneer farmer had to encounter seventy-five or a hundred years ago. After having traveled perhaps for weeks or months in a prairie schooner drawn by an ox team, in quest of a suitable location, he settled down either in the wild forest or the limitless prairies. After months of ceaseless, hard toil he may have built a shack for himself and family and after more hard work he succeeded in sowing, planting and garnering his first crop, he faced his greatest problem in disposing of his hard-earned fruits of labor. He was probably a hundred or more miles away from any town or settlement; the only chance he had was to load his few sacks of corn or wheat unto his ox-team and start for the distant town, where he could exchange his farm products for provisions and other things necessary on the farm.

Now contrast this with present methods of disposing of farm products. The majority of farms in the grain producing states are within easy reach of railroads, the farmer takes his grain to the town a few miles away, sells it, gets his cash, buys whatever he needs and is again on his farm the same day. Could he do his business so expeditiously if there had not been a grain buyer in that town? Then again, if that grain buyer who bought this farmer's grain did not have any chance to protect himself by selling that grain for future delivery in Chicago or any other point where grain futures are dealt in would he have bought that grain of the farmer? Certainly not, unless he could have bought it away below the market price.

WARN MONTANA GRAIN DEALERS

Grain dealers of Montana have recently been warned by Chief Grain Inspector J. E. Templeton to be careful of grain storage tickets. It is said that an eastern printing house is sending samples of a grain storage ticket to the Montana grain trade, claiming the ticket conforms with the new rulings of the Montana state grain inspection department.

Mr. Templeton says the ticket has not been authorized by his department, and that it omits several important items that are positively required by law, and that it also incorporates matter that the law does not authorize. A form of storage ticket is now being prepared that will in all respects conform to the requirements of the Montana law. Copies of it will be sent to the grain trade, and to other persons and firms applying for it.

The grain receipts on the Omaha Grain Exchange, on Monday, July 21, were the heaviest, for a single day, in the history of that market. They totaled 283 cars of wheat, 108 cars of corn and twenty-three cars of oats. The corn was of last year's crop, but the wheat and oats were just in from the fields.

The State Board of Agriculture of Yucatan, Mexico, has asked the Secretary of Finance at Mexico City to remove the import duty on foreign corn until December, on account of the present high price of corn in Yucatan. It is probable that this exemption will be granted. Last year, when a similar shortage occurred, the duties were suspended.

NICKEL PLATE ELEVATOR FIRE AT
CLEVELAND

During a storm on Wednesday, July 30, a bolt of lightning struck the elevator owned by the Nickel Plate Elevator Company at Cleveland, Ohio, and immediately caught fire. Flames shot high into the air and for two hours the heat was so intense that firemen were forced to fight the fire in relays.

The elevator was 100 feet long by 50 feet wide and

and crated packages of seeds, tobacco and similar articles.

In the arrangement of the above classification, the items shown under A, viz., flour and sugar, have been grouped together in order to secure cars which might be necessary for such shipments, i. e., those free from soiled floors and interiors carrying odors liable to damage the goods; whereas cars selected for classification B, intended for bulk grain, clearly indicate by their character what might be suitable for their safe transportation; likewise classification C, covering the commodities mentioned, could be safely transported in a car which, while it should be tight, need not neces-

GRAIN PRODUCTION IN SPAIN

The 1912 crop of barley in Spain, according to a recent consular report, amounted to 1,306,228 tons, as against 1,889,697 tons in 1911. The area under cultivation was 3,296,956 acres, of which 3,081,599 acres were dry land, yielding 1,143,206 tons, and 215,357 acres irrigated land, which yielded 163,022 tons.

The oats crop decreased from 491,459 tons in 1911 to 334,355 tons in 1912. The area under cultivation was 1,278,074 acres, of which 1,269,358 acres were dry land and the rest irrigated.

There was an important decrease in the production of rye in 1912, the crop amounting to 479,250 tons as against 734,031 tons in 1911. The cultivated area was 1,943,655 acres, as against 1,987,423 acres in 1911, practically all dry land. The corn crop also decreased, amounting to 636,800 tons in 1912, as against 729,778 tons in 1911.

THE HOME OF NATIONAL AUTOMATIC
SCALES

It may be stated that the National Automatic Scale Company arrived at its present very complete and adequate factory at West Pullman, Ill., from Marietta, Kan., via Peru, and Bloomington, Ill. The business saw its inception at Marietta, Kan., some thirty years ago, when Angus McLeod, seeing the future possibilities for, and the need of automatic weighing devices, commenced the manufacture of a line of automatic scales.

The business prospered and as greater expansion became necessary, it was moved later to Peru, Ill., and for the same reason was transferred again to Bloomington, Ill. It became well established at Bloomington and the company was doing a very thriving business when the owners decided they needed a plant of their own. After investigating they chose the factory shown in our illustration, located at West Pullman, Ill., as best suited to the requirements which they had in mind as a permanent home for the manufacture of National Automatic Scales.

The building was purchased about the first of the year. It is a brick and steel structure 75x125 feet and two stories in height. The offices are located on the second floor and are conveniently arranged with plenty of light. Shipping facilities are of the best as two switches lead to the factory, one from the Illinois Central and one from the



Courtesy of the "Cleveland Press"

NICKEL PLATE ELEVATOR, CLEVELAND, OHIO, AFTER THE FIRE

attained a height of 100 feet. Its appearance after the fire is shown in the accompanying illustration.

Owing to the elevator's location and size the fire was not completely put out for two days and a force of firemen played streams of water upon the smoldering embers during all that time. The loss is estimated at \$50,000.

OVERHEAD INSPECTION OF BOX CARS

At the recent convention of the Master Car Builders' Association at Atlantic City, N. J., an interesting report was submitted by the Committee on Overhead Inspection of Box Cars. This committee's work was directed principally on the lines of obtaining some uniform method of inspection for cars containing shipments of grain, flour, feed and other products which are readily damaged by moisture and the report said in part:

It seems to be the general opinion, at least in certain localities, that steps might be profitably taken working to the standardization of rules and requirements for the selection and inspection of equipment required for certain shipments, and if it is going to be possible to secure improved conditions along this line, they are most likely to be obtained by confining attention to shipments readily damaged by moisture, eliminating for the present the consideration of other commodities, at least until some systematic rule can be established and gotten under way.

It would seem that a composite card acceptable to the roads now following the practice of securing certificate of inspection cards would be the first solid ground we might hope to reach towards working to a uniform practice. Furthermore, if the interest of such roads can be secured in this direction, the proposition will be readily given the necessary impetus to carry it as far as it can be employed with profit, and without danger of being used beyond the point of economy.

In endeavoring to fit together the inspection cards now in use, it is pointed out that there are three apparent classifications of lading for which the box car is on some roads and in some localities receiving special attention before loading. The three classifications would seem to cover the situation, at least until improvement can be suggested and worked out. The idea contemplates—

Classification A.—Flour and sugar.

Classification B.—Bulk grain.

Classification C.—Lime, cement, plaster; boxed, sack

surely be as carefully selected as to other conditions as a car for classification A, intended for flour.

While it is very clearly understood that several roads, as above indicated, have used the certificate of inspection card with profit, and have succeeded in very materially reducing the damage to shipments and claims therefrom, other roads have indicated their lack of particular interest in any such move on account of either a vast difference in the variety of commodities handled, or on account of the proportion of shipments not requiring such a careful inspection predominating. It would seem therefore to remain with each road to



THE NATIONAL AUTOMATIC SCALE WORKS, WEST PULLMAN, ILL.

work out and decide for itself what such a plan of inspection might net them. It is certain, however, that the most earnest and sincere co-operation on the part of the railways is absolutely necessary, otherwise the maximum benefit is not to be obtained for the amount of money thus expended.

The use of colored cards would seem to be perfectly practicable, and would not necessarily disturb the fundamental inspection plan proposed, provided it would be considered better to relieve the inspection force from writing the classification A, B and C on the card (which as a matter of fact is practically nothing); and requiring as a substitute the carrying of a larger number of cards so as to designate the classification by color.

Chicago, West Pullman & Southern Railroad. The power furnished is electric, and as they are located in a manufacturing district there is plenty of skilled labor available. At the present time they have a full force at work on their lines of continuous weighers, sacking scales, varying in capacities from 5 pounds to 5 bushels per draft, and special automatic weighing machines for all kinds of grain.

The owners of the business are Angus McLeod and his son A. T. McLeod. The former is in charge of the factory while the son is manager of the sales department and office force.

The Grain from Keene Township

Too Much Grain Comes Into Bill Gehring's Elevator and He Is Forced to Use All His Ingenuity to Find Storage Room

By GUIDO D. JANES

The harvest flood came. It drifted into town in wagon lots, submerged the ten hopper bins of the Gehring Elevator Company, and overflowed into an adjoining warehouse.

Bill Gehring did not relish this, especially since the inundation deprived him of his office space in his elevator and turned him out into the cruel world.

"What will we do, anyway?" he said, addressing Foreman Rogers, as the two stood a stone's throw away from the grain-flooded district surveying the horribleness of it. "Keene Township farmers will be in next week with that wheat I contracted for and what will I do with that 10,000 bushels? Help! Murder!"

"Sh—" laughed the foreman good naturedly. "It's not so worse. I have a plan up my sleeve. Why not rent Smith's coal pocket and use that for a storehouse? When—"

"No," interrupted the grain dealer scratching his head. "Oil and water won't mix, neither will coal dust and wheat. That's not practical. Even now I see those up-country farmers throwing more grain at our prostrate place of business."

"Well boss, if the coal pocket won't fill the bill, why wouldn't it be a good idea to blow up the bridge over Mill Creek and keep those pesky Keene farmers at home until repaired. It will give us time to get in our grain cars."

"Fine, Rogers. An excellent suggestion. You have elevated me out of woe with your ball-bearing-man-lift proposition. I'll chase right down to Tenk's hardware store and buy a dime's worth of dynamite."



"THROWING MORE GRAIN AT OUR PROSTRATE PLACE OF BUSINESS"

mite. You do the job tonight and I will pension your wife if you fall in battle."

"Thanks."

"Don't mention it. So long till I get back."

So Gehring beat it for the hardware store in question and asked for the explosive.

"Are you going to blow up a chimney, too?" asked the clerk.

"No. I have an old corn separator I want to dispose of, and placing a stick of dynamite under it is the easiest and quickest way. But who is going to shatter a chimney?"

"Parks. He owns that land where the old distillery brick chimney is and wants to do away with it."

"My!" ejaculated Bill. "That's the best and biggest chimney in the county. Gee, a great idea! I'll buy it. When is Parks going to totter it over?"

"Immediately."

"Gracious."

And without stopping to kill further time the

grain dealer left the store. Instead of heading toward his place of business he shoesoled his way direct to the old distillery on the Bottom road. He reached there almost a minute too late, however, for Parks was in the act of pressing the electric battery that exploded the dynamite under the brick structure.

"Wait," cried Bill, interrupting the proceedings



"WHY NOT RENT SMITH'S COAL POCKET?"

by kicking the wire to break the circuit. "I want that chimney."

"What for?" asked Parks, quite irritated. "You can't smoke it and it never drew good. Get out of the way."

"No, I won't. See here, Parks, I am up against it. I have the bumper crops of Keene Township to take care of and no available place. That chimney yonder will make the best grain storage tank in the country. Lease it to me until the worst is over."

"Sure, Gehring. You can take it if you blow it over when you get through with it."

"I will."

So the elevator man wheeled about and hurried

"Good gracious. Help! Murder!"

And without carrying on further talk he hurried panic-stricken on his way. Half an hour later, perspiring, tired and dusty he came upon the Mill Creek bridge. Feeling around in the darkness and whispering he endeavored to locate Rogers. But Rogers who was in hiding mistook him for an intruder and poked him one in the face with his fist. He was about to do it again when he discovered his error. Then he apologized.

"Don't apologize," cried Bill. "But put out that fuse. Don't blow up the bridge. I have rented that old distillery chimney for an elevator."

"Well, I swan. You came just in time."

STATE GRAIN INSPECTOR OFFICE CHANGED

George B. Ross, the new grain inspector for the state of Kansas, has removed the inspection office from Kansas City, Kan., to Topeka. At its first meeting in the new office headquarters the State Grain Grading Commission established a new grade for wheat which will be known as Kansas red Turkey hard wheat. To be so graded on inspection it must be round, plump, smooth and of the dark Turkey color. They claimed it was their idea in establishing the new grade to encourage farmers to grow more of it, as millers were willing to pay a premium for that kind of wheat. The standard on No. 2 hard winter wheat was also lowered by removing the requirement for "plump" kernels.

MINNESOTA ELEVATOR WITH ELECTRIC DRIVE

The elevator of C. D. Orr, Northfield, Minn., is one of the most successful plants of its size in southern Minnesota. Mr. Orr has been located in the same place for over thirteen years and has been constantly making additions and improvements to his elevator so as to keep pace with the growth of his business. The arrangement of the elevator equipment is such as to insure economical and efficient handling of grain at all times.

The elevator proper is of cribbed construction containing nine bins. Its equipment includes a wagon dump, grain cleaner and automatic scales. There has recently been added a concrete annex, not shown in the illustration, which will be used principally for the storage of coal. Electric drive is



ELEVATOR OF C. D. ORR AT NORTHFIELD, MINN.

toward Rogers to put him next. It was growing dark, and it was practically lamp light when Bill reached the grain flooded place. But Rogers was not there.

Getting scared he headed for the foreman's rented residence and found him absent from that place.

"He said he was going to Mill Creek bridge," said Mrs. Rogers.

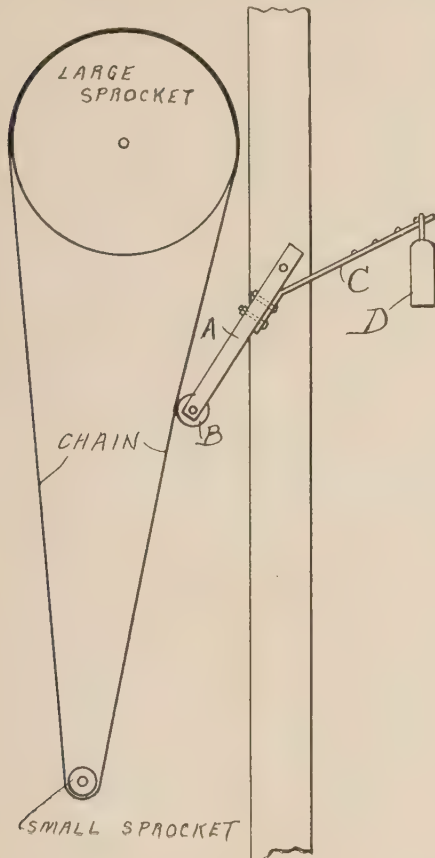
employed throughout, power being secured from a nearby central station.

Much of the success enjoyed by Mr. Orr is attributed by him to the fact that he practices the Golden Rule 365 days every year. He has aimed to make customers his friends and his straightforward methods of conducting business have produced excellent and lasting results.

TIGHTENER FOR LINK CHAIN

BY NESTOR

In a certain elevator it was necessary to run a link chain in a perpendicular position, with a large sprocket at the top and a very small one



at the bottom. With the least slack the chain would run off the little sprocket at the bottom. A tightener similar to that illustrated herewith helped the writer out of the difficulty.

A piece of scantling, A, about 2x5 inches, was bolted to a stud. The scantling was mortised out at the end and a wooden pulley, B, inserted, with a bolt through the scantling and the pulley. An iron rod, C, was bolted to the scantling, with a weight, D, suspended thereon.

PUGET SOUND WAREHOUSE COMPANY
ACCUSED BY FARMERS

A hearing was held before the Public Service Commission of Washington on July 26, upon the complaint brought by the Farmers' Grain Agency of Walla Walla, Wash., against the Puget Sound Warehouse Company, which has its main office at Tacoma, Wash., and warehouses scattered through the wheat belt.

It was charged at the hearing that the Puget Sound Warehouse Company fails to ship promptly grain stored in its warehouses by the Farmers' Grain Agency, when all advance and legal charges are fully paid and receipts properly indorsed and surrendered, holding the grain represented in such receipts from month to month and demanding extra charges before it will ship, thus preventing the complainant and other shippers engaged in like businesses from filling contracts and causing unnecessary expense in way of interest, insurance and other incidental items.

Among other charges were: The defendant corporation does not name the variety of grain in its warehouse receipts which is said to be a discrimination against other buyers as the buyer must know the variety before the grain can be purchased owing to the difference in market prices of the various kinds and grades of grain; practically all the grains of the 1911 and 1912 crops ran short in weight because of the fact that the company did not ship all the grain represented by the warehouse receipts; the force of men in charge of the warehouses is inadequate to perform necessary services; that they

discriminate in their own favor in the ordering of cars and that they evade inspection.

Both plaintiff and defendant were represented by counsel and a number of witnesses were heard for

each side. A decision, it is expected, will be rendered by the Commission in a short time, although whether the body has sufficient authority to handle it remains to be seen.

OUR VISITORS

CHARLES B. RILEY

The so-called Hoosier State is universally known as the haunt and habitation of the justly celebrated Riley family and where, tradition says, the "O" which originally carried the banner for the name, lies buried many fathoms deep in good rich American soil. However, be that as it may, two Rileys there are whose names, like Abou Ben Adhem's, "lead all the rest." There is little use in calling attention to James Whitcomb, for he has never been properly introduced to many grain men, but as for Charles B., it were a crime not to know him.

Somehow or other the career of Charles B. Riley was directed in grain trade channels, which is a source of great satisfaction to the Indiana Grain

CHARLES N. HOWES

It is not only probable, but an absolute and assured fact that if Charles N. Howes ever announced the publication of "What I Know About Grain Cleaning Machinery," there would be a wild scramble to secure sets. The name "Howes" has for so long a time been synonymous with high-grade grain cleaning machinery, that grain men would jump at the chance of obtaining the volumes written by one of the leaders in this line.

Unfortunately there is only one set in existence which is owned by the author and kept for his perusal only. It took him 42 years to complete the stupendous work, for he started 'way back in 1871, when he entered the office of the Eureka Works at

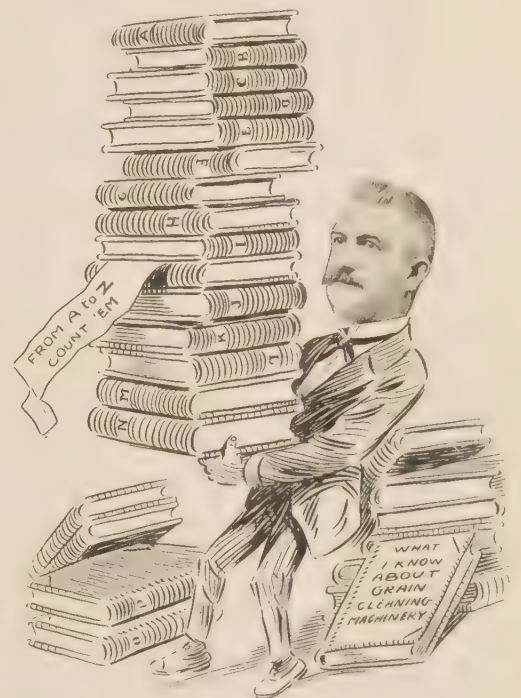


"THE LAW IS STILL HIS HOBBY"

Dealers' Association, which organization, always alive to its opportunities, greedily holds on to him as secretary. It was also highly gratifying to Indiana lawyers, as it removed from their immediate midst a dangerous competitor.

For be it known that C. B. Riley has one of the best legal minds we have ever encountered, and the bar lost a brilliant light when he directed his ability along other lines. Nevertheless the law is still his hobby and in the few brief intervals of leisure that one of the busiest of grain association secretaries can find he may be seen poring over some dusty tome or law-book, absolutely contented and at peace with the world.

But for the strange twist of Fate referred to, we might even now be hearing of the achievements of "Judge" Riley. It's somewhat of a pity, too, because a judicial gown would be especially becoming to his style of manly beauty. This may readily be seen in the drawing of what "might have been." As it is he is probably the leading amateur lawyer in the ranks of the grain trade and is often consulted upon legal problems.



"THERE IS ONLY ONE SET IN EXISTENCE"

Silver Creek, N. Y. From that time down to the present day his chief joy in life has been absorbing the details of the grain machinery business, embodying his own ideas in certain improvements and accurately recording data where it is readily accessible.

Now Mr. Howes is president of the Invincible Grain Cleaner Company at Silver Creek, N. Y., and has so many friends he has lost count of them, but even these friends do not always realize how thorough a knowledge of grain cleaning machinery he possesses. Naturally a modest and reticent man, he does not allow the secret of his 42 years' work to become publicly known.

Undoubtedly one reason why "What I Know About Grain Cleaning Machinery" has never been seen in the book stores is because Mr. Howes commenced his career as a country school teacher and since that period has never quite lost his aversion to anything remotely resembling text-books. So, for the present at least it remains in oblivion and we merely have to learn all we can from the verbal statements of Mr. Howes.



Published on the Fifteenth of Each Month

BY

Mitchell Brothers Publishing Co.

OFFICE:

Manhattan Building, 431 South Dearborn Street
CHICAGO, ILL.HARLEY B. MITCHELL.....Editor
A. J. MITCHELL.....Business ManagerSubscription Price - - - - \$1.00 per Year
English and Foreign Subscription - 1.75 " "

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This paper has a large circulation among the elevator men and grain dealers of the country, and is the best medium in the United States for reaching persons connected with this trade. Advertising rates made known upon application.

CORRESPONDENCE.

We solicit correspondence upon all topics of interest connected with the handling of grain or cognate subjects.

CHICAGO, AUGUST 15, 1913.

Official Paper of the Grain Dealers' National Association
and of the Illinois Grain Dealers' Association.

MINIMUM ERRORS IN BILLS OF LADING

The statement made by Henry F. Goemann of Toledo, at the meeting of the Tri-State Grain Producers' and Dealers' Association held during the past month, that as much care should be taken in writing bills of lading as in checks or drafts, is worthy of careful consideration. Too much importance cannot be attached to the idea for it is an absolute fact that errors are constantly being made which center almost entirely about the bills of lading. To be sure grain men have had their attention called to the necessity of care before, but not in the same emphatic words.

With all the struggles to obtain a safe bill of lading, at present none exists that deserves such a name. There are innumerable chances for errors to be made and it is extremely necessary that the chances be reduced to a minimum amount. Sometime ago a great deal of pressure was brought to bear upon the railroads with the effect that it was understood that all agents had received instructions to use pen and ink or indelible pencil, when issuing bills of lading, and that the number of packages should be written out as well as placed in numerals and furthermore that every bill should bear the stamp of the issuing road. If these rules are in force today, they are not obeyed on many of the roads.

Bills have been drawn up and presented time after time to Congress without creating more than a ripple on the surface. The time has come, however, when the grain trade is actively and unitedly pressing for favorable legislation upon a bill which combines the best features of previously presented measures. We refer to the Pomerene Bill which has received the unqualified endorsement of grain associa-

tions throughout the country. The essential points of the bill have been discussed so many times that it is unnecessary to review them here. It is a piece of legislation which is desirable from all standpoints looking to the best interests of the grain trade and should be passed by a substantial majority.

EXPRESS COMPANIES AS MIDDLEMEN

Particularly significant is the recent contract made by one of the large express companies with a farmers' organization in the Southwest to carry farm products direct from the field to the consumer's door. Although at the present time little will be carried but seeds and produce, the way is opened for rapid development in other lines.

The contract may be regarded as the first step taken by any of the express companies to resist the inroads made upon their profits by the parcel post. The old undisputed theory of self preservation is at work and express companies can be counted upon to depart from the rigid lines for which they were originally incorporated and engage in other legitimate enterprises.

Whether the express companies will ever seriously consider entering the purely grain field is a question that time only will prove. They may, it is claimed, before long, gradually enlarge their scope as middlemen in which case the grain receiver may be menaced by a formidable competitor. However, this is purely an experiment and as such it is more than interesting. The company will in effect take orders from city customers for delivery of farm and garden products, engaging in turn with the farmers to supply these products. This would be disastrous to the middlemen if carried to its logical conclusion, which it probably will not be.

TROUBLE AHEAD IN KANSAS

The original dispute between the Kansas City Board of Trade and the Kansas State Grain Inspection Department has been augmented by the entrance into the field of battle of the Wichita Board of Trade, which two weeks ago established its own grain inspection department. It is declared by Chief Grain Inspector Ross that the Wichita inspection bureau has no legal right to exist and he has had a conference with the attorney-general with a view to obtaining a restraining order.

In this he is backed by Governor Hodges who is reported to have said that in the event of the Kansas City and Wichita Boards of Trade refusing to come under the state inspection department, a conference of representative grain men will be called. These men will be asked to send their grain out of the state through other markets. In other words, an attempt will be made to divert grain from Kansas City and Wichita. This is so palpably weak on its face that receivers are bearing up with extreme fortitude. However, in the event of this plan failing which it undoubtedly must, a special session of the legislature may be called to enact a law making state grain inspection compulsory. According to attorneys of both Boards of Trade, such legislation is a flagrant violation of the constitutional right of every

citizen to dispose of his property as he may see fit.

In the meantime oil was not poured on the troubled waters by the fact that the new Wichita inspection bureau has proved a huge success. It has been demonstrated that the bureau inspects more grain and does it faster than the state grain inspection department. This brings it down to a mere question of efficiency and certainly puts the Wichita Board of Trade in a very favorable light before the public. The state authorities, however, still fail to see their illogical position and as they are determined to force the issue, there is no doubt that a strenuous battle will result, though from this angle the odds seem to be on the two exchanges.

PELLAGRA SCARE NOT JUSTIFIED

Much has been written, editorially and otherwise about pellagra, and the alarm about the disease has increased in proportion. In view of this fact it is interesting to note the statement of Dr. H. C. Lavinder who was recently sent by the U. S. Department of Agriculture on a trip of inspection through the Southern states where there is a great deal of pellagra. Dr. Lavinder says:

"There is no reason for the people to become excited about pellagra any more than about tuberculosis, typhoid or malaria. The only difference is that pellagra is comparatively a new thing. We have no drug that will cure it, but it is the same way with the other diseases. We have a good treatment for it though. It is more of an economic problem than a medical one. It takes money to treat pellagra, or any other disease. We have an appropriation for our work, and although it doesn't amount to so very much, we will be able to secure a much better equipment which will be done at once."

It is further interesting to note that the good doctor has nothing whatever to say on the subject of bad corn causing pellagra. As a matter of fact, while Europe still thinks that pellagra results from eating bad corn, people in this country are breaking away from the bad corn theory. We know that pellagra must have a cause, but that cause is at present unknown. It is no more reasonable to attribute the disease to bad corn than to anything else that is spoiled. It is a pretty safe prediction that when the true cause is discovered, it will prove to be something entirely different from present conjectures.

A NEW WAY OF SETTLING ARGUMENTS

The public statement made by the Montana State Railroad Commission offering to wager and critic the sum of \$100 that he is wrong in one of his statements, creates a new precedent. What a dazzling vista of possibilities this opens up! Think of the ease with which our public officials from the President and Cabinet down can now dispose of annoying criticism. By making an appropriation for the purpose of such wagers, government officers will be able to maintain the dignity of their office. Such a fund would scare off the pikers, who might have the facts but not the money and it might even prove a source of revenue, since officials having inside information would in many cases be betting on a sure thing. But then again think

of our yellow press putting up a disturbing question to some one in authority under the captivating headline, "Bet or Quit."

It seems that State Senator Stevens of Montana does not believe the recent cuts in grain rates made by the Montana carriers to be worthy the name of reduction. He so expressed himself in somewhat forcible language in several interviews. Thereupon members of the State Railroad Commission feeling that such a statement was a direct slap at themselves who had been instrumental in having the new rates established, promptly responded by offering to wager the above mentioned amount that the reductions are real and confer great benefits upon nearly all sections of the state. We have been holding our breaths for the senator's comeback but up to the present time the wager has not been accepted.

ANOTHER "FUTURES" BILL

Would that there might arise some legislator of sufficiently heroic proportions and advanced mental calibre to introduce a bill which condemned fellow legislators who introduce anti-future bills to be "shot at sunrise." The increasing frequency of such bills is a sore trial to the proverbial patience of grain men. After a campaign has been waged successfully against one such measure, another one arises to take its place. What matter is it that so far the drastic measures proposed have been individually defeated? The very persistency of purpose with which the advocates of anti-future legislation bob up again and again, is not only annoying but alarming. Now it is Senator Robinson of Arkansas who has introduced a bill into the Senate reading as follows:

That any person sending or offering to send any message relating to a contract for the sale or purchase for future delivery of any farm product shall furnish to the person carrying or transmitting such message, an affidavit that he is the owner, or in good faith intends to acquire such farm product, and in good faith intends to deliver the same, or that he is at the time entitled to the future possession of such farm product by virtue of a contract for the sale and future delivery thereof made by the owner thereof, and that he in good faith intends to receive or deliver such farm product; provided that, for instance, any person sending a message or messages for the future delivery of any farm product or relating to a contract or contracts for the sale or future delivery of same may file with the person carrying or transmitting said message or messages an affidavit that all messages, if any, theretofore sent by him or caused to be sent by him for the twelve months immediately following do not relate to and will not relate to contracts for the sale or purchase for future delivery of any farm product not in good faith intended to be actually delivered; and provided further, that if such farm product is at the time of the sending of said message or messages in actual course of production by him the sender shall be deemed the owner thereof.

It shall be unlawful for any person to willfully or knowingly make a false statement in any affidavit required or permitted to be made by this act.

The bill has been referred to the Committee on Interstate Commerce. Whether it will be pigeon-holed there or defeated in open session remains to be seen. At present there seems to be a substantial majority in Congress who are opposed to this kind of legislation. But the campaign of education now going on to enlighten the public as to the functions of grain exchanges and the practical necessity of future

dealings, must be thorough and complete in order to escape unfriendly legislation a few years hence.

ECHOES OF THE MINNESOTA INVESTIGATION

It seems somewhat strange to those who followed the course of the recent Minnesota grain exchange investigation, that the so-called Equity Exchange could derive any desirable advertising from the Senate and House Committees' reports. Although the Minneapolis Chamber of Commerce emerged with a clean bill of health, lax business methods of the other exchange were brought to light by witnesses and certain statements made as to handling capacity were found to be greasily misleading. In view of these facts it would seem a better policy on the part of the latter to disregard the investigation entirely in working up new business rather than rake up details which were much better forgotten.

Notwithstanding this, however, it appears that agents and supporters of the Equity Exchange are again taking the center of the stage with attempts to show just how the exchange was vindicated in the investigation. A particularly strong campaign is now being waged in North Dakota to induce country shippers to send their grain to the Equity Exchange. From reports so far received only partial success has been obtained. The legislative inquiry lost the Equity Exchange many staunch supporters who cannot be enticed back into the fold. Even many of the country newspapers have abandoned their defense of this exchange and its methods and it is probable that a harder task awaits its representatives than is anticipated. Were the statements of the latter institution in regard to storage and handling capacity true and assuming that it could render the service which is desired, its futile attempts at mudslinging must still be deplored and in reality gain few real friends.

GOVERNMENT MONEY FOR CROP MOVEMENT

Probably the most interesting feature in connection with the plan of Secretary of the Treasury McAdoo to distribute \$50,000,000 to the various agricultural states to help move the fall crops, is the attitude assumed by various sections of the country. While the proposition meets with fairly unanimous favor, it is condemned in whole or part by quite a few. This, too, notwithstanding the fact that the clause providing for the acceptance of prime commercial paper as security on an equal basis with government bonds and thus allow the funds to be quickly and easily distributed on funds within the reach of all.

The South protests that the fund is far too little to be practicable and this is somewhat borne out by the applications so far filed by southern cities. Conservative bankers in the South, however, assert that the grumbling is uncalled for and that any amount which will tend to ease the strain is desirable. Wichita, Kan., declares that it does not intend to apply for a cent of the fund, as it has sufficient money on hand to move the crops without outside assistance. All of which makes good

newspaper copy and helps to some degree in advertising Wichita. Peoria enters a unique but strenuous protest, not against the Government fund itself, but upon the fact that the city was overlooked in the letters sent out to the fifty-nine so-called principal cities of the various agricultural sections. That ever active and energetic organization, the Peoria Board of Trade, immediately rushed a wire to Washington calling attention to the fact that Peoria is one of the great grain centers of the country. Meanwhile, however, while the Secretary of the Treasury was being educated regarding some facts and figures of which he was ignorant, Peoria with its injured civic pride would perhaps not have been the safest place in the world for him to visit.

New York is, of course, frankly against the radical idea of having any Government funds except through the accustomed financial channels of that city. The *Wall Street Journal* grows rather caustic in expressing its opinion as follows:

I insist! This appears to be the attitude of the nimble Secretary of the Treasury. An ounce of prevention is worth a pound of cure. But a few thoughtful bankers, whether correctly or no, are wondering whether tons of prevention may find the medicine closet bare when a real crisis occurs. Eastern bankers will watch with a somewhat critical, though not jealous, eye the actual parceling out of the treasury's millions. Not that anyone believes that the distribution will be made with the slightest idea of winning ballots. That would be intolerable. Still it is interesting to note the rather frank declaration that the sections that need the money are those that have pro administration votes. Perhaps the secretary has heard the counsel of the practical parent: "Marry for love; but love where there is money."

The main effect of the announcement, however, has been to create a feeling of security in trade circles. The fact that it is very similar to a plan proposed by the previous administration renders it less likely to be used for political capital, and in any event the general opinion is that it is a step in the right direction and therefore commendable.

Omaha grain men are determined to hold up that market and are reported to have served notice on the railroads operating between Omaha and Chicago, and Omaha and Minneapolis, that if they continue to send cars out into the country around Omaha for grain to be shipped direct to Chicago and Minneapolis, there will be some retaliation. It is said that this will not be a boycott, but that they propose to withdraw their patronage from the lines working against the Omaha grain market.

Still that noticeable lack of harmony over the insurance situation in Missouri is preventing any solution of the trouble. Governor Major recently published a lengthy statement, evidently intended to be conciliatory, promising remedial legislation and fair treatment if the companies would resume writing. At the same time, however, a shorthand report was received of a speech made at Joplin by Insurance Superintendent Revelle, in which it is said he threatened to have the presidents and all the officers of the companies indicted and sent to the penitentiary. With such contradictory statements, surely the insurance companies are not wholly to blame for their present stand.

EDITORIAL MENTION

A moving alfalfa mill traveling from farm to farm is a recent suggestion from California.

A number of defective scales have been reported by state scale inspectors in eastern sections of Kansas. About one-third of the scales examined were condemned.

The old rhyme, "A wet May makes good hay" has been disproved this year, for, despite the fact that May was decidedly dry, good hay crops are reported in nearly all sections.

When the Grand Army of the Republic holds its annual encampment at Chattanooga, Tenn., on September 12, the North Dakota delegation will carry samples of grain and seeds of the state in some form or other, if present plans mature.

Although the State North Dakota Railroad Commission has been receiving applications for licenses at the rate of 200 per day, it is reported that so far about 75 per cent of them have been rejected. A bond of \$5,000 is required by law and the security on the bonds submitted is what led to so many rejections.

The town of Cereal, in Alberta, is reported to be prospering rapidly. Why shouldn't it, with such a name? The original builders were wiser than they knew to so christen a place in the center of the Canadian grain belt. The idea of naming a town for its chief occupation or industry is by no means a bad one.

The recently organized Los Angeles Grain Exchange announces that it will not deal in futures and no call rule will be established. The organization thus will have the shell of the cocoanut without any meat and it will doubtless prove exceedingly interesting to watch the operation of the exchange under such conditions.

An Ohio man visiting Port Arthur and Fort William recently, for the first time, predicted that the Twin Cities will one day rival Chicago not only as a terminal grain market, but also in population, thereby drawing down great plaudits from the pleased Canadians. The growth and development of the two ports, however will easily warrant attention.

The fact that an elevator in a small Kansas town recently burst when overfilled with wheat and scattered the grain all over the ground, has been noted by nearly all the newspapers of the country. This does not help the owners of the elevator in question despite the fact that it is a "gift of the gods" to "prosperity" editorial writers may help him to bear his loss.

Just about the time we become a little bit "chesty" over the big crops of this country, the "little demon of cold facts and figures" presents to our memory the fact that the United States ranks only seventeenth in relative productivity. Ahead of us are Belgium, Switzerland, Holland, United Kingdom, Germany, Denmark, New Zealand, Egypt, Japan, Canada, Chile,

Sweden, Norway, France, Austria and Hungary in the order mentioned little Belgium having the highest productivity. There can be no more potent argument for crop improvement work.

What's in a name? Not very much, to be sure, so far as the grain business is concerned. Yet we cannot refrain from calling attention to the fact that Robert Wheat raises the cereal of that name in the vicinity of Kinderhook, Ill., also that Barney Bunke, a grain dealer, was recently suspended by the Cincinnati Chamber of Commerce on account of refusing to pay for a car of oats.

The antagonists of the Glass Currency Bill now before Congress are directing their chief attack upon securing amendments to establish an agricultural currency secured by actual supplies of corn, wheat and cotton. It is not believed, however, that this proposed legislation will be considered as a part of the general currency reform plan, although it may be taken up separately later on.

A new use for turkeys is to save alfalfa, say reports from California, where a band of 1,900 turkeys has been secured by a leading producer to eliminate grasshoppers. The advantages are obvious for, besides getting rid of the insects, epicures of California may be persuaded around Thanksgiving time that the "grasshopper-fed" turkeys are the highest form of gastronomic delight.

A wallet containing \$22 and some valuable papers was found in a bale of alfalfa hay recently and returned to the shipper in New Mexico by the honest recipient in Alabama. The latter, however, took occasion to remark that if it was a new way of advertising the alfalfa hay he certainly would not object. Needless to say, the incident has raised the hay receivers several degrees in the estimation of New Mexico at least.

This is the day and age of slogans. No sooner had Toledo shot that startling bombshell, "You Will Do Better in Toledo" than Wichita, Kan., complacently announced the phrase, "We Help Feed the World." The extraordinary feature of the latter slogan is the naive modesty displayed by the use of the word "help." When the contagion spreads, as it undoubtedly will, it is most probable that some of the markets will use less qualifying adjectives.

The alfalfa bug is spreading rapidly through the country. By this, of course, is meant the wave of alfalfa-growing enthusiasm and not an insect pest. The various alfalfa campaigns are all resulting successfully and yet there is one effect that the alfalfa promoters have not reckoned with. Advocates of alfalfa are becoming so enthusiastic as to urge the abandonment of other crops and in this they are backed by a leading agricultural journal. The latter attempts to prove that the farmer actually loses money in corn raising, but in making its calculation neglects to include the value of fodder and the corn that goes into feed. Prof. Holden certainly preaches no such doctrine as the doing

away with other crops, and his enthusiastic followers must not allow their fervor to get the better of their reasoning powers. The thing to do is to advocate adding alfalfa, with a system of rotation that eventually will place the land in condition to produce maximum yields of corn, wheat, oats and other grains.

Canada is somewhat disappointed to find that Canadian grain, despite all that has been done, continues to find its way to the seaboard by way of United States ports. In 1912 the shipment of wheat from Port Arthur and Fort William was 87,579,696 bushels, of which 45,326,450 went to Canadian ports and 42,252,246 to American ports, mostly by American vessels. Of the total wheat exported from Canada nearly 64 per cent went by way of the United States. Canada enjoys the benefit of shorter routes, but this is fully offset by the higher insurance rates. The government has expended great sums in improving navigation, but thus far the southern routes are viewed with more favor by insurance men.

Fearing that the Big Four Railway would acquire a title to the right of way through his property by reason of the expiration of the time limit for adverse possession, Thomas C. Linger, president of the Ohio Hay & Grain Company, Findlay, Ohio, took drastic measures by setting a post in solid cement on either side of the railway track. He then stretched a heavy timber across from one post to the other and then securely locked them, making a most formidable barrier and which prevented the use of the track. A temporary injunction was obtained by the railway, but at a later hearing the court decided that the grain man must receive rental from the railway for the number of years the latter had used the land, since title had been acquired by the former.

If we could all have some of the philosophy of Walt Mason perhaps the crop situation would not affect us in the least. One of the latest effusions of the prose rhymester says: "The chinchbugs chew the corn and wheat, which keeps the farmer flinching; and though he knows just where they eat, he cannot stop their chinchling. If he should buy a load of drugs and try to ease his sorrow, by killing off 10,000,000 bugs, there'd be far more tomorrow. And so he feels misfortune's pinch, and groans beneath the pinchers, and lets the bugs go on and chinch with their back action chinchers. The cutworms kill the wheat and corn with double-action cutters; the farmer leaves his house at morn, and views his fields, and mutters some language of magenta tint, which here must be omitted; it wouldn't make a hit in print—for children 't isn't fitted. He goes to town to get relief by drinking soda fizzes, and while he tells about his grief the cutworms wield their scissors. This sort of thing we hear each spring, and oftentimes we wonder that crops are raised at all, by jing, since they're all knocked to thunder. The farmers in the fall, indeed, bring in their loaded wagons; no consolation do they need, no comforting with flagons. So let the humble cutworm cut, the chinch bug do its carving; they doubtless are a nuisance, but the farmers are not starving."

GEORGE T. BURRELL IN AUSTRALIA

George Burrell, president of the Burrell Engineering and Construction Company of Chicago, returned with I. A. Faleida, chief engineer of the company, early in August from a two months' tour in New South Wales, Australia, where they have been investigating conditions with the view of affording that country more modern facilities for storing and handling grain. They inspected the Sidney and Newcastle terminals and covered over 3,000 miles by railroad, and 1,000 miles in automobile, in visiting the various grain and wheat belts.

Mr. Burrell found conditions very far from modern as far as taking care of grain was concerned. One of the pictures shown presents a view of grain piled up in sacks awaiting shipment. At the right of the picture is what in this country would be termed a flat car. In Australia it is a grain wagon. Sacks of grain are piled on the car for transportation. Another picture shows H. V. Jackson of the Agricultural Department of New South Wales, Mr. Burrell and a group of men belonging to the Farmers and Settlers Association of Narrowmine, New South Wales. Mr. Jackson is first and Mr. Burrell third on the right of the picture.

A very large number of pictures taken by Mr. Burrell and Mr. Faleida on the trip showed very little variety in the manner of stacking grain in sacks, the Australian method corresponding to this country's grain elevators and warehouses. Sacks

piled quarters at Morgan and Fifteenth streets, when they moved into their present plant.

The present officers are Fred De Coningh, president; A. L. Sykes, vice-president; O. D. Beardsley,



GEORGE T. BURRELL AND A GROUP OF AUSTRALIANS

At the Extreme Right Is H. V. Jackson of the New South Wales Agricultural Department. Mr. Burrell is Third from the Right.

Besides their business of manufacturing corrugated iron and roofing they now specialize in hollow

secretary. They are men of experience who foresaw the demand for fireproof constructed buildings which has grown so rapidly in late years, and met it with a class and variety of goods that has made them famous in this branch of manufacture.



SACKS OF GRAIN PILED UP AWAITING SHIPMENT IN NEW SOUTH WALES, AUSTRALIA

of grain so piled would resemble one of our lumber yards without the avenues. In very many cases no covering was provided for the grain whatever and methods of handling subjected it more or less to the dirt as well as the elements.

As a result of Mr. Burrell's trip, which was made at the request of the Australian government, plans are being made for two large terminals and twenty-five country elevators at various points. It will be a start towards giving that country very much needed improved conditions in its grain handling and forwarding trade.

THE SYKES COMPANY'S PLANT

Owners of grain elevators will, without doubt, be interested in a view of the factory of the Sykes Company, which has undoubtedly manufactured and supplied more corrugated iron and metal roofing to the grain trade than any other concern in this country. The company's very complete plant is located at 930 West Nineteenth Place, Chicago. It is a brick structure with 170 feet frontage, 100 feet depth, and has five stories with basement.

The early business, of which the present company is the growth, was established at Niles, Ohio, in 1877, and the first product was roll and cap steel roofing. It was removed to Chicago in 1890 and incorporated in 1893. Until 1904 the company occu-

metal doors, hollow metal windows and sheet metal work for building construction. The product is



VIEW OF THE SYKES COMPANY'S PLANT, CHICAGO, ILL.

known all over the country and sales are made all through Canada and from Portland, Me., to the Pacific coast.

market should have fluctuated within such narrow limits in the presence of such disturbing influences will strike the outsider as surprising.

THE LIVERPOOL GRAIN TRADE

A review of the Liverpool grain trade for 1912 by the *Corn Trade News* shows that the price of wheat has fluctuated a good deal during the 12 months, but at the finish it is just at the level whence it started last January. Contract grade wheat in Liverpool was worth \$1.78 a cental (100 pounds) last January. By the middle of April it advanced to \$2.07 a cental, only to fall again in July to \$1.82 and after a shortly sustained rise to \$1.96 in the month of October, owing to the outbreak of war in southeastern Europe, it steadily declined during November and part of December until the whole of the advance was lost.

The range between the lowest and highest price of the year was only \$0.29 per 100 pounds, or \$1.37 per quarter, and this in spite of such disturbing effects as two wars, a great coal strike in this country, a railway and dock workers' strike in Argentina, and a sensational rise in ocean freights, to say nothing of an alarming depletion of the reserves of wheat in the United Kingdom in consequence of the labor troubles there and in Argentina. That the



FRANK I. KING
Toledo

NEWS OF THE TERMINAL MARKETS



HENRY A. RUMSEY
Chicago

WHEAT EXPORTS

L. W. Forbell & Co., of New York City reports early in August: "Export trading in wheat has been on a smaller scale, with the preference given hard wheat at a slight premium. The demand for red winter wheat has fallen off considerably, with exporters showing indifference because of lower foreign bids and increasing ocean rates."

RICHMOND EXCHANGE HAS NEW OFFICERS

The following officers will serve on the Richmond Grain Exchange, Richmond, Va., for 1912-1913: J. E. Cox, Jr., president; R. L. Chenery, vice-president; V. E. Booker, secretary.

Board of Directors—W. F. Richardson, Jr., W. D. Saunders, W. R. Savage, Edwin Alvey, Thos. L. Moore, C. W. Wingfield, H. W. Wood, S. T. Beveridge, John R. Cary.

ANNUAL MEETING OF THE MONTANA GRAIN GRADING COMMISSION

The Grain Grading Commission of the state of Montana will meet at the office of J. E. Templeton, chief grain inspector in the Capital Building at Helena, at 10 a. m. on the 26th day of August, 1913, for the purpose of establishing a grade for all kinds of grain brought or handled in the state, which shall be known as "Montana Grades." All persons interested are invited to be present and bring samples of the 1913 crop of grain.

NEW TORONTO GRAIN EXCHANGE

The Toronto Grain Exchange has been incorporated by the Ontario Government. The provisional directors are Edward Charles Fisher, G. N. Shaver, George Wilson Briggs. The objects of the corporation are given as follows:

"To maintain a grain exchange; to promote uniformity in the customs and usages of merchants; to facilitate the speedy adjustment of business disputes; to acquire and to disseminate commercial and economic information and generally to secure to its members the benefits of co-operation in the furtherance of their legitimate pursuits."

CHANGES IN MEMBERSHIP

Baltimore.—Richard Gambrell, Chicago, was elected a member of the Chamber of Commerce, on transferred certificate of James T. Clendenin, deceased. Reported by Secretary James B. Hessong.

Chicago.—New members admitted to the Board of Trade were: Harry D. Atwood, John A. Todd, Chas. H. Wade, John B. Pierce, W. S. Cowen, Thos. E. Moran, Wm. Mills, Earle G. Rapp and Edw. S. Sheridan. The following memberships were transferred: Marshall E. Boynton, Walter Sterne, Peter B. Carey, John S. Dickerson, Jos. J. Lippert, Jos. M. Phillips, John Mullally, Est. Geo. A. Rhodes, Harry F. Todd. Reported by Secretary J. C. F. Merrill.

Duluth.—New members admitted to the Board of Trade were: A. H. Weinhardt, E. H. Woodruff, Frank J. Seidl. Members withdrawn were: C. H. Thornton, C. G. Ireys, H. F. Davis, E. R. Anderson. Reported by Secretary Chas. F. Macdonald.

Kansas City.—Edward F. Leland was admitted in membership in the Board of Trade on transfer from P. P. Donahue. Reported by Secretary E. D. Bigelow.

Minneapolis.—During July the following new members were admitted to the Chamber of Commerce: R. W. Scroggins, W. A. Lamson, L. C. Andrews, W. L. Mason, Frank W. Falk and Edwin Dodge. Reported by Statistician, H. W. Moore.

Peoria.—C. W. Gruenspelder transferred membership in Board of Trade to B. H. Peters of Peters & Company; James F. Parker to John M. Van Meys of Parker & Groff; Joseph P. Griffin to F. G. Coe of the Corn Products Refining Company. Reported by Secretary John R. Lofgren.

EDWARD A. PRAEGER

Edward A. Praeger, the popular western representative of the grain commission firm of J. P. Griffin & Company of Chicago, has an alias. But, gentle reader, with this distinction and this difference; he permits the use of both names at one and



EDWARD A. PRAEGER

the same time and in the same community. His alias carries no opprobrium, smacks of no violation of law, nor bears any mark of penal servitude. His alias is "Dutch."

The reason for this name attaching itself to Mr. Praeger is that he is a natural comedian and frequently entertains his friends in a monologue in which he takes the part of a German senator. But this is only a side line. His real business is grain, and born in Chicago some twenty-nine years ago he has spent fifteen of them in his chosen occupation. For the past six years he has traveled out of Chicago into western territory and for about two years has been representing his present firm.

Mr. Praeger tempers work with play. He is an apostle of the art of relaxation. Cassius was so lean as to excite suspicion. No one suspects "Dutch." In short, none is more welcome than he on his western circuit; and with a good and substantial house back of him he is constantly making new friends. This results as well from the excellent business services

rendered as from the good cheer that constantly emanates from the traveler who is temperamentally wise and sound.

OPENING OF LOS ANGELES GRAIN EXCHANGE

As announced in our last issue, the Los Angeles Grain Exchange was organized early in July and the formal opening took place Monday, August 4. The Exchange is located on the ground floor of the I. W. Hillman Building and appropriate ceremonies ushered in the new and important acquisition to the commercial life of this thriving southern California city.

ST. PAUL EXCHANGE HOLDS ELECTION

At the recent annual meeting of the St. Paul Hay and Grain Board of Trade the following officers and board of directors were chosen for the ensuing year:

Theodore Wolff, president; A. P. Dolenty, vice-president; Guy Carleton, treasurer. Board of Directors—A. O. Dieson, C. C. Chambers, F. J. Bring, E. F. Stein, Paul Konopatski, C. C. Grey.

LARGE RECEIPTS OF GRAIN AT DULUTH

All records for volume of grain handled at Duluth, Minn., were broken by a very large margin during the 1912-13 crop year which ended July 31, according to preliminary report issued by Charles F. McDonald, secretary of the Duluth Board of Trade. The total receipts were 144,775,526 bushels, compared with 71,917,613 bushels the previous year, an increase of 72,857,913 bushels, or more than double. The former record receipts of 1898-99 were broken by 45,642,526 bushels, and Duluth now makes the claim for itself of being the second greatest primary grain market in the world.

THE WAGNER LETTER

E. W. Wagner & Co. of Chicago say of wheat in their letter of early part of August:

"Consuming Europe will evidently raise somewhat less wheat than one year ago. European visible of 66,000,000 is small. Russian crop is guessed around last year's total at 720,000,000 or so. Great question in Russia is quality. Last year the big crop was not generally merchandisable. Cost of meats and living is high abroad. In England one northern city has just voted to increase the rents of its entire improved property owing to increased costs. Europe should absorb 620,000,000 wheat and flour for 1912-13.

"Russian quality and quantity will decide the wheat price. August is occasionally a bull month, but more often—the August advances in wheat are nullified by pressure of world new wheat at terminals. Low wheat prices of any season rarely arrive in August or September, as the data of world's crops is still in the rough at this time. The coming August and September will witness an immense drifting abroad of United States wheat. Past three wheat crop years have been ample years. Tendency each year has been for wheat to make low prices of last half of year in November and December.

"Total world's exports of wheat and flour for year ending July 1, 1913, were a record at 665,000,000. United States shipped 143,000,000, Canada 113,000,000, Argentina 127,000,000, Russia 108,000,000, India 65,000,000, Australia 46,000,000, Danube 54,000,000. Apparently the United States and Canada stand ready to duplicate 1913-14 with a combined deluge of 256,000,000. Recent world situation is strengthened by certainty that Europe will import liberally all the crop year. The world's rye and barley crops are given as 8 per cent below 1912. In a period of eight

years Russia has flooded Europe twice with enormous quantities of wheat.

"Russia is the despair of crop computators. Her news is subsidiary to her fall offerings and shipments. In the crop year of 1910-11 she enlarged her weekly shipments around August 15 and ran 5,000,000 to 8,000,000 per week until December. Any such repetition this crop year would inevitably result in low wheat prices. The high cost of living in every direction and absence of live stock rebuilding facilities on a large scale abroad offset the phantom of tight money as regards wheat consumption.

"The United States new tariff may become effective in January next. We have been on a competitive export basis with Canada for years. Effect is likely to be local and trifling. If Russia exports heavily it will be a side factor early in the fall and be discounted early. Owing to enormous fall exports the United States wheat visible of 1912 did not assume formidable proportions until November, 1912, when it increased from 41,000,000 November first to 55,000,000 December first."

CHICAGO BEAUTIFUL

Rosenbaum Brothers, in the Chicago Board of Trade, have been pioneers in a great many things. They are leaders rather than followers, and while



FLORAL WINDOW LEDGES OF THE OFFICES OF ROSENBAUM BROTHERS, CHICAGO

the innovation of a window ledge full of flowers has not much perhaps to do with grain, yet it adds to service. For beauty stands always for utility and light, just as the hideous conforms to darkness and death.

The offices of Rosenbaum Brothers are on the seventh floor of the Board of Trade Building. Across the alleyway is the Postal Telegraph Building, from the seventh floor of which the picture shown in our illustration was taken. From the Sherman Street side the flowers appear much more beautiful, but as our aeroplane had been borrowed for the day on which the picture was taken, and as we do not like to hang from a rope stretched from the top of a building, on account of our wife being of a very nervous temperament, we are unable to show the best view of the office windows. But the idea is clearly depicted in the illustration; the idea which President E. L. Glaser has inculcated as a part of the basic principles of the company's large grain business—beauty, and utility, and service.

GOOD OUTLOOK FOR WHEAT

T. A. Grier & Co. of Peoria, Ill., write optimistically on the wheat crop, the first part of August, as follows: "The brightest spot in the business horizon is, to our mind, the wheat crop of 1913. It will be large in volume, splendid in quality, and seems to be so wanted and appreciated abroad that its rapid absorption by Europe will bring millions of gold back to this country during the next few months and thus put our financial matters in decidedly better shape than they have been lately. We are speaking particularly of the winter wheat crop, which is all raised, most of it threshed, and largely

on way to market. We feel inclined to include the great spring wheat crop of the Northwest in the same category, for all the recent news from that country is reassuring and indicates a splendid yield there also. This seems most fortunate, for no such favorable comparisons can be made of any other cereal. Oats are a light crop, corn is suffering from intense and long continued heat without any moisture to help out. Hay is short, pastures gone, and the lesser crops such as rye, barley and potatoes much below last year's yields."

FARMERS AND THEIR BEST GIRLS

Have farmers ever hugged their best girls? C. A. King & Co. of Toledo say they have. In a recent market letter, a paragraph on "Corn Visible and how much the August Shrinkage?" they state: "Crop promises much smaller than last year and farmers will probably hug their reserves as tightly as they formerly hugged their best girl." It might be maintained that a farmer with any reserve at all doesn't hug his best girl. Be that as it may the complete paragraph, which is very timely, follows:

"Corn visible always fades some during August. How much will it shrink this month? Last crop was record killer and supplies of old corn are much larger than usual. Nearly all of it is in the invisible

although the visible is above an average for August. Crop promises much smaller than last year and farmers will probably hug their reserves as tightly as they formerly hugged their best girl. Weather will largely decide receipts. Oat crop is short. Corn visible is six and half millions against two and half millions year ago. Largest in late years seven millions two years ago. August shrinkage is usually less than a million. Largest recently was three and three-quarters millions six years ago."

TERMINAL NOTES

Andrews & Company, Minneapolis, recently purchased of the Marfield Grain Company the old Pillsbury elevator, having a capacity of 700,000 bushels.

Lee D. Irwin has been reappointed grain inspector, and Thomas Maddox reappointed hay and straw inspector on the Louisville Board of Trade.

H. L. Hankinson of Minneapolis, Minn., has arranged to open an office at Duluth, Minn. George F. Foster, it is reported, will be local manager.

The firm of Worrell & Co., which has been doing a continuous business in hay and grain at Vicksburg, Miss., since 1866, recently made an assignment for the benefit of creditors. The liabilities were estimated at \$15,000 with assets at about \$10,000. Will Raworth was named trustee and took charge of the business.

C. E. Curry Co. is a newly organized firm to engage in the grain business at Portland, Ore. The founder of the firm is C. E. Curry, who for the past sixteen years, has been engaged in the grain business on the Pacific coast. For several years past, until July 1, he was manager of the Tri-State Term-

inal Warehouse Company. Offices of the new company are at 407-408 Concord Building.

H. W. Devore & Co. of Toledo, Ohio, unloaded a car of standard white oats at Toledo one day the latter part of July, which contained 2,995 bushels and 20 pounds.

John E. Getchell, recently with the Marfield Grain Company of Minneapolis, Minn., has gone with the Andrews Grain Company, and has been succeeded in his former place by Ross Mathews.

P. C. Newlin, for a number of years connected with W. H. Small & Co., seed and grain dealers of Evansville, Ind., has become associated with the Courteen Seed Co. of Milwaukee, Wis.

W. P. Brazier had the honor of receiving the first car of new wheat on the Philadelphia Commercial Exchange, and at Baltimore the first carload of new wheat was taken in by Frame, Knight & Co.

The Chicago plant of the Corn Products Refining Co., employing about 500 men, was closed late in August for an indefinite period. The company established this plant about twenty-five years ago.

H. M. Stover of La Crosse, Kan., is now Supervising State Grain Inspector for Kansas, with headquarters at Salina, having succeeded R. H. Allerton, who has filled the office for the past eight years.

Parker M. Paine, who has been associated with the Barnum Grain Co. of Duluth, Minn., for the past eighteen years, has started in the grain business for himself. Offices are at 206 Board of Trade Building.

J. Murdock Dennis of Dennis & Co., representatives of Armour Grain Co., Chicago, on the Baltimore Chamber of Commerce, sailed August 9 on a vacation to be passed at Trouville, France and Ostend, Belgium.

The Anchor Grain Company of Minneapolis, Minn., has established a branch office at Sioux City, Iowa. The company has secured offices in the Davidson building, and Paul Larson of Wakefield, Neb., is in charge.

The United Grain Companies of Pittsburg, Pa., have filed articles of incorporation to deal in grain and food products. The capital stock is \$50,000 and the incorporators are Duncan McDonald and G. W. Blakslee of Pittsburg and Judson S. Hall of Zion, Ill.

Henry Wissbeck of the Wissbeck-Grunwald Co., grain and feed dealers of Milwaukee, Wis., has been suspended from the Milwaukee Chamber of Commerce for one year. Among the charges leading to the suspension were uncommercial conduct and unpaid claims.

Taylor & Patton of Des Moines, Iowa, have taken over the grain brokerage business which has been conducted at Marshalltown, Iowa, by L. G. Clay at 24 East Main street. Max Patton will have charge of the office, and the Chicago correspondents, the Updike Commission Company, are retained.

The McCaull-Webster Elevator Company, one of the large grain concerns of Minneapolis, Minn., has completed arrangements to remove its headquarters from Minneapolis to Sioux City, Iowa. They have taken quarters in the Davidson building and state that in the new location they will be better able to take care of the company's line of elevators in Nebraska and South Dakota.

W. L. Richeson, chief grain inspector of the New Orleans Board of Trade, together with R. C. Jordan, superintendent of terminals for the Illinois Central Railroad at New Orleans, stopped off at Wichita, Kan., recently on a trip that included Omaha, Kansas City, Hutchinson and other points. The object of their visit was to try to induce western and southwestern exporters to give the New Orleans market a reasonable share of their grain export business.

Fitzgerald Brothers' Company of Cincinnati, Ohio, has become exponents of high living and high thinking. This has come about through their recent removal from the Provident building to the top floor of the new Chamber of Commerce skyscraper. We have been to the top floor ourselves and personally we don't believe that the Tower of Babel, resulting in the "confusion of tongues," was as high. Fitzgerald Brothers claim they will now have better facilities than ever for getting top prices for their

THE AMERICAN ELEVATOR AND GRAIN TRADE

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country shippers, and state that they are going to make every endeavor to put the business of every patron of this house on a high altitude of prosperity.

The Long Dock Mills has succeeded the Long Dock Mill & Elevator Co. of New York City, recently dissolved. Former President D. D. Allerton was elected president of the new company and Frank Brainard, a former vice-president of the New York Produce Exchange, was elected vice-president and treasurer. A. D. O'Neill is secretary and manager.

A lawsuit was recently started among the stockholders of the Farmers Grain Company of Haven, Kan., which has some unusual features. The suit was brought by C. B. Cope and two other stockholders of the elevator company to restrain a dividend which the officers had declared and in which only a part of the stockholders would participate.

Traders in the Chicago Board of Trade were treated to some realistic excitement other than rising markets on a recent morning, when a negro by the name of Woody, who had charge of the exchange check room, brandished a revolver with threats to shoot another negro. He was arrested by special Board of Trade policemen and charged with carrying a concealed weapon.

J. M. Evans, a clerk in the office of the M. & O. Railroad at Jackson, Tenn., was recently arrested on the charge of tampering with way bills on cars of grain and disposing of them to his own advantage. One car of corn sold at Memphis netted him, it was stated, the sum of \$448. He did not deny the charge and will stand trial at the next term of the Madison County Criminal Court.

The Quinn-Shepherdson Company of Minneapolis, Minn., which has been expanding very rapidly of late, has just established a branch office at Duluth, Minn. It is in charge of B. V. Loosemore, vice-president of the company, who has up to the present time made his headquarters at Sioux Falls, S. D. W. R. Vye, who has been associated with Mr. Loosemore, remains at the Sioux Falls office.

RECEIPTS AND SHIPMENTS

Following are the receipts and shipments of grain, grain products, hay and seed at the leading receiving and shipping points in the United States for the month of July, 1913:

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Baltimore.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Buffalo.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Chicago.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Cincinnati.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Duluth.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Indianapolis.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Kansas City.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Milwaukee.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Minneapolis.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for New Orleans.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for New York.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Omaha.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Peoria.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Philadelphia.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for St. Louis.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for San Francisco.

Table with 4 columns: Location, Receipts 1913, Receipts 1912, Shipments 1913, Shipments 1912. Data for Toledo.

EXPORTS AND IMPORTS

The following is a statement of the exports and imports of various cereals, seeds, etc., for the month of June and for the 12 months ending with June, as reported by the Bureau of Statistics, Department of Commerce and Labor (quantities only unless otherwise stated):

Table with 5 columns: Articles, June 1913 (1912, 1913), Twelve Months Ending June (1912, 1913). Data for Exports and Imports.

Two immense transfer elevators, one on the Pacific Coast and the other at the upper terminal of the Hudson Bay Railway are planned by the Canadian government to be completed in time for the opening of the Panama Canal.



From Zahm's Red Letter, August 9. MISS CORN HAS SURELY "SHRUNK" From 3,000,000,000 July 1 to 2,672,000,000 on August 1.

TRADE NOTES

E. P. Stimmel, manager of the Beall Improvements Company, Decatur, Ill., spent a day in Chicago the early part of the month. Mr. Stimmel reports business good.

The Hess Warming and Ventilating Company, Chicago, is sending out free, for use in moisture testers, a steel swab holder for cleaning the receiving graduates and tubes. This device can be used on the glass as well as the metal flasks.

John S. Metcalf Company, Ltd., Montreal and Chicago, has been awarded contract by the Canadian Pacific Railway for extensive work in connection with the steel river house at Elevator "D," Fort William, Ontario. The estimated cost is \$45,000.

The Nurdyke & Marmon Company of Indianapolis, Ind., recently filed notice with the secretary of state of the enlargement of its corporate objects and of increase of its common stock from \$100,000 to \$300,000, and the issuance of \$500,000 of preferred stock.

The August issue of *Graphite*, published by the Joseph Dixon Crucible Company of Jersey City, N. J., contains more than the usual number of interesting illustrated articles on graphite and its popularity as a lubricant, paint and for other uses. The publication will be mailed to all parties interested in the products which the Jersey City firm manufactures.

A report from an American consul to the Bureau of Foreign and Domestic Commerce, Washington, D. C., states that a business firm in his district, with offices in the United Kingdom also, requests prices and particulars on corn drying machinery, corn shellers and machinery for stripping corn from the cob. Parties writing the Bureau at Washington for information are instructed to refer to No. 11,382.

The Ruel Wrecking Company at Seventy-third Street and Stony Island Avenue, one of Chicago's largest wrecking houses, recently wrecked the Rock Island Elevator B at Thirteenth Street and the river, and are offering this material for sale. It comprises some 2,000,000 feet of white pine and oak cribbing, flooring and other timber, together with 5,000 doors and windows, and a large quantity of plumbing material. The material is being loaded in cars at the premises on which special prices are made in carload lots.

The Macdonald Engineering Company of Chicago, Ill., has been awarded a contract by the Stanard-Tilton Milling Company of St. Louis, Mo., to erect at Dallas, Tex., an extensive milling plant, consisting of a 2,500-barrel mill, a grain elevator of 300,000-bushel capacity, with complete equipment for 25 cars per day, a power house to be equipped with internal combustion engines of 500-horsepower, a warehouse of 300,000 square feet floor space, an office building and storage tanks and transfer tables. The entire plant is to be built of reinforced concrete and fitted with the most modern appliances and conveniences, and will represent an investment of over \$500,000. Work has been started and will be pushed to completion about January 1, 1914.

On the "Old Fair Grounds" at the north end of Avenue "G" bridge at Sterling, Ill., there was played a game of baseball on a recent Saturday afternoon, interesting from the fact that the line-up of players was composed of men who played ball on those grounds some forty years ago. Among the players was G. M. Robinson, president and treasurer of the Charter Gas Engine Company of Sterling. Mr. Robinson played shortstop for the "Charters," who were opposed by the "R. B. & W.'s." We presume that Mr. Robinson played good ball in the early seventies as well as at the Saturday game. The man who makes good engines ought to be able to play base-

ball and the Charter Gas and Gasoline Engines have been for years a type of reliable, efficient and reasonably priced power.

The Western Fire Appliance Works of Chicago, manufacturers of the Zeleny thermometer for registering in the elevator office the exact temperature of grain in storage bins, are now installing the system in the Pioneer Steel Elevator, with capacity of 2,100,000 bushels, and the Crescent Elevator, with capacity of 1,000,000 bushels, at Minneapolis, Minn. This will make twelve elevators at Minneapolis with installations of the Zeleny system and shows the growing interest in the system in that market.

Over 500 pounds of Ironite waterproofing, used for making concrete or cement elevator pits and basements damp-proof and waterproof, have been sold during the last thirty days by the Chicago Ironite Waterproofing Company, Chicago. Among the purchasers who also report it to have proven successful are: Farmers Grain Company, Graymont, Ill.; J. H. Dole & Co., Avon, Ill.; Mayflower Mills, Ft. Wayne, Ind.; Parma Milling and Elevator Company, Parma, Ida.; St. Anthony Milling and Elevator Company, St. Anthony, Ida.; Burley Milling and Elevator Company, Burley, Ida.

Among the literature recently issued by the Union Iron Works of Decatur, Ill., is a set of double size post cards on which one of their various machines is depicted in one or more views, with a line or two only, calling attention to the special features embodied in the machine illustrated. They are designed for the busy man who can tell at a glance a perfect machine when he sees one. A late card shows the Western Gyration Cleaner, which is built in seven sizes in capacities from 175 to 2,400 bushels per hour. This machine looks good on the card, and a user, in a brief testimonial, says it also looks good and performs good service in his elevator.

It is customary for grain commission merchants throughout the country to distribute novelties for advertising purposes at grain conventions, during holiday season or at other times as a token of esteem for business or for securing new trade. One of the most useful novelties just out is the "Shur-Lite" new safety match box offered by Alschuler, Schiller Building, Chicago. The "Shur-Lite" match box, as illustrated on another page, is one of 3,000 different novelties in stock and protects the light in any wind, making it a most appropriate and appreciative novelty for grain shippers. An advertisement may be inscribed on the box and it can be secured at a very low cost in quantity lots.

The Invincible Grain Cleaner Company, Silver Creek, N. Y., the large manufacturers of grain cleaning machinery, and who are always on the lookout for the best devices known for handling and conditioning grain, inform us that they have perfected arrangements with L. J. Dennis of Memphis, Tenn., to manufacture and place upon the market the Dennis Perfect Corn Dryer, for corn and other grains, which will be known hereafter as the Invincible-Dennis Perfect Dryer. Mr. Dennis has had many years' experience in milling and handling corn, principally in the South, and being well informed upon the conditions and requirements necessary to the proper conditioning of all corn products, is in position to know absolutely what a corn drying and cooling plant should do to be a success. The Invincible-Dennis Perfect Dryer is not an experiment. It has the distinction of standing high among those most competent to judge of the relative merits of devices of this kind, those having made not only casual comparison, but those having actual experience with the different makes. It does not break the grain, but extracts the moisture, leaving the grain whole, bright and attractive. It does not require an outside housing, but can be placed

anywhere in the building without any prejudice to the insurance. It is said to be most economical in operation, requiring less steam pressure and extracting any pre-determined amount of moisture, all of which is an important consideration. Any further particulars regarding this dryer and names of those using it can be had by addressing the Invincible Grain Cleaner Company, Silver Creek, N. Y.

An announcement of unusual interest to the grain trade was made recently from the offices of the Webster Manufacturing Company of Tiffin, Ohio, to the effect that T. K. Webster, for many years its president, and one of the principal stockholders, had severed his connection with the company and had been succeeded by F. S. Shaw. Mr. Shaw has been for twelve years president of the Cable Company of Chicago, which, under the management of himself and associates, has become one of the cities most important and progressive industries. E. P. McPherson, for many years vice-president and a director of the Cable Company, has become connected with the sales organization, and is a director of the company. Chas. S. Clarke, also an associate of Mr. Shaw and head auditor for the Cable Company, has become a director and treasurer of the company. The other officers are: A. T. Perkins, vice-president and general manager; Alex Kiskaden, vice-president; L. H. Webster, secretary. There is a very strong board of directors including, besides the officers named, R. D. Sneath, Tiffin, and George D. Loomis of Tiffin. Both Mr. Perkins and Mr. L. H. Webster have been with the company for many years and have a practical knowledge of all departments of the business. *Webster Method* for July states: "The affairs of the Webster M'g Company are now in the hands of men of proved ability, and each department will be brought up to the highest efficiency. Minor changes will be made in the organization as occasion demands. The engineering and manufacturing departments will be strengthened and the reputation of 'Webster Products' will be maintained and the company keep its place as a leader in the manufacture of elevating, conveying and transmission machinery."

TO STOP MISUSE OF DECISIONS UNDER
FOOD AND DRUGS ACT

The Department of Agriculture has made an important change in the form of issuing notices of judgments which give the result of actions under the Food and Drugs Act. Hereafter the headings of these notices will show at a glance whether the government won its suit or the defendant manufacturer was acquitted. This change results from the fact that the Department has discovered that salesmen have used these notices in the old form to prejudice a customer against a competitor's products even where the competitor has been acquitted. This was possible with the old form, because it was frequently necessary to read the entire notice of judgment in order to learn whether a penalty had been entered or the defendant acquitted. Many persons did not take the time or trouble to read the notice, and in many cases took it for granted that a notice of judgment meant in each instance that the government had won, and that to sell the defendant's product would be to violate the Food and Drugs Act.

The publication of the notice of judgment is the severest part of the penalty when the government has won its case against the manufacturer, because publication of the verdict against him is a serious blow to his business. The new form will state clearly in its heading whether the judgment is in favor of or against the manufacturer, and thus make the punitive effect of a verdict in favor of the government still stronger, but relieve manufacturers who have won their cases from the danger of false use of the decision on the part of their competitors.

The record wheat crop of central Illinois was marketed at Pana, Ill., on July 15. It was grown on twenty acres of the farm of Herman Smith of Owaneco, four miles northwest of Pana, which yielded 999 bushels and thirty pounds, or a fraction less than fifty bushels to the acre.



ILLINOIS

The Crosby Elevator at Monroe Center, Ill., has been remodeled.

The Bane Elevator at Arrowsmith, Ill., has been undergoing repairs.

The Donovan Grain Company, Donovan, Ill., has amended its charter.

John Redmond of De Kalb, Ill., has leased the elevator at Cortland, Ill.

Fred Eastburn is building an elevator at Eastburn, Iroquois County, Ill.

The Robertson & Waughel Elevator at Smithfield, Ill., has been repaired.

The Farmers' Elevator Company has new lumber buildings under construction at Mazon, Ill.

The Morris Grain Company of Morris, Ill., contemplates building an elevator at Lisbon, Ill.

Glabe & Glabe have installed a 10-horsepower electric motor in their elevator at Chatsworth, Ill.

The Shellabarger Elevator at Oreana, Ill., has been sold to the Oreana Grain Company, for \$20,000.

The Drummer Grain Company, of Gibson City, Ill., has constructed a new driveway supported by concrete walls.

Merritt & Wireman are building a new elevator at East Lyon, Ill., which will have a capacity of 25,000 bushels.

The De Long Elevator at Foosland, Ill., has been overhauled and a new boot and leg have been installed, also a man-lift.

Willis Brinkerhoff, of Redmon, Ill., has begun the construction of a new elevator to replace the house destroyed by fire on May 20.

M. G. Kibbe, of Champaign, Ill., may place a grain buyer in his elevator at Panola, Ill., formerly operated by the Panola Elevator Company.

Cecil Gilmore has taken over Geo. M. Duzenberry's interest in the grain firm of Duzenberry & Connelly at Watseka, Ill., the new firm to operate as Connelly & Gilmore.

At the quarterly meeting of the Farmers' Elevator Company at Leonard, Ill., a 50 per cent dividend was declared on the capital stock. The company will overhaul and repair its plant.

A contract has been awarded for the reconstruction of the elevator of the Farmers' Grain and Coal Company, at Green Valley, Ill. The house recently collapsed under a weight of grain.

The Allen Farmers' Elevator Company has been incorporated at San Jose, Ill., with a capital stock of \$10,000. The incorporators are Hubert I. Ingersoll, E. V. Ingersoll, Henry Warner, Isaac Reed, John Leinweber, Henry Miller and Fred Peplow.

J. C. Terry, of Blue Mound, Ill., has taken over Edward F. Drobisch's elevator at Millersville, Ill., for \$6,500. The elevator has a capacity of 20,000 bushels. The deal also included other property.

The Grand Trunk Western Railway Company has awarded a contract to James Stewart & Co., Chicago, for the erection of a two-story cement elevator at Homan avenue and Forty-ninth street, Chicago.

F. G. Wilson, of Virginia, has leased the Frackelton Elevator at Petersburg, Ill., and purchased the Five Point Farmers' Elevator south of that place. He will remove to Petersburg and operate both houses.

C. A. Wylie, grain dealer at Kewanee, Ill., plans to build a new elevator next season, as he will abandon the house he now occupies to make way for the new station of the Chicago, Burlington & Quincy Railroad.

The farmers of Malone Township have organized an elevator company and will build a house at West San Jose, a new station on the Northwestern Railway about five miles west of San Jose, Ill. John G. Heiskel and J. W. Harmel, of Peoria, Ill., are interested in the company, which will incorporate for \$10,000.

S. W. Strong, secretary of the Illinois Grain Dealers' Association, reports the following changes in the ownership of elevators: J. C. Terry succeeds Alex. Hillman at Millersville, Ill.; L. T. Elliott succeeds Geo. W. Ruple at Kemper, Ill.; the Neola Elevator Company succeeds Dickinson & Lewis at Lee, Ill.; C. A. Davis succeeds Thompson & Housh at Moweaqua, Ill.; Morris & Stone succeed the Shellabarger Elevator Company at Coles, Ill.; the Mc-

Nabb Grain Company succeeds Surface & Packingham at McNabb, Ill.; the Farmers' Grain and Supply Company (mail Peotone) succeeds the Truby Grain Company at Andreas, Ill.; the Farmers' Grain and Supply Company (mail Peotone) succeeds the Truby Grain Company at Wilton, Ill.; F. L. Warner succeeds T. H. Greenfield at Arrowsmith, Ill., and L. J. Kaiser succeeds the Shellabarger Elevator Company at Maroa, Ill.

EASTERN

The Sharpsville Milling Company, Sharpsville, Pa., recently incorporated by James McGrew, George B. Lewis and B. H. Thompson, will also conduct a retail grain and hay business.

The Cunningham Grain Company has been incorporated at Portland, Maine, with a capital stock of \$50,000, to deal in grain, cereals, flour, etc., by A. G. McPherson and W. S. Linnell.

The United Grain Companies, Inc., has been incorporated under the laws of Delaware, with a capital stock of \$50,000, to engage in business at Pittsburgh, Pa. The incorporators are Duncan McDonald and G. W. Blakeslee, of Pittsburgh, and Judson S. Hall, of Zion City, Ill. The company will deal in all kinds of grain and feed and will manufacture flour.

The St. Albans Grain Company, St. Albans, Vt., is building a reinforced concrete elevator in connection with its milling plant at St. Albans. It will have a capacity of 100,000 bushels and be equipped with machinery for handling 25 cars per day. The Macdonald Engineering Company of Chicago, Ill., has the contract and expects to have the building ready for operation by November 1.

MISSOURI, KANSAS AND NEBRASKA

A 10,000-bushel elevator is under construction at Amity, Mo.

A farmers' elevator company is building an elevator at Bee, Neb.

A farmers' elevator company is being organized at Hartington, Neb.

The Mead Grain Company contemplating building an elevator at Fort Scott, Kan.

The Bowen Milling Company of Independence, Kan., is building an elevator at Liberty, Kan.

The Interstate Grain Company of Joplin, Mo., has increased its capital stock from \$200,000 to \$500,000.

The Farmers' Elevator Company has been incorporated at Morrison, Mo., with a capital stock of from \$10,000 to \$15,000.

The Saunders-Westrand Company has sold its elevator and live stock business at Wynot, Neb., to H. E. Scott of Lincoln, Neb.

Elevators will be established at Hayland, Denman, and Newmarch, new towns on the Hastings & Northwestern Railroad, near Hastings, Neb.

Marcus Kroger, who has been the manager of the Saunders-Westrand Elevator at Wayne, Neb., for several years, has purchased the property.

The Bowersock Mills and Power Company has completed its new concrete elevator at Lawrence, Kan., giving the company 400,000 bushels additional storage.

A number of farmers' unions in the vicinity of Blue Rapids, Kan., have purchased an elevator at that place, and W. F. Peacock will have charge of the house.

The Kansas Grain Company is razing its elevator at Sterling, Kan., and a new house, having a capacity of 20,000 or 25,000 bushels, will be erected in its place.

The Bowen Milling Company has completed its new elevator at Independence, Kan., which occupies the site of the mill destroyed by fire several months ago.

A branch of the Fort Worth Elevators Company has been incorporated at Wichita, Kan., with a capital stock of \$5,000. The incorporators are B. L. Douglas, Jule G. Smith, Ben U. Fenquay, F. T. Douglas and Hal M. Black.

C. Vincent of Omaha, Neb., general manager of the Farmers' Grain Company, has organized an elevator company at Lyons, Neb. The officers are: John W. Frey, president; Charles Peterson, secre-

tary; Thomas McKenzie, Frank Porter and Everett Preston, trustees.

The Napoleon Elevator Company has been incorporated at Napoleon, Mo., with a capital stock of \$10,000. The incorporators are H. A. Hara, Charles Hoffman and W. H. Larling.

The Niehoff-Schulze Grain Company has been incorporated at St. Louis, Mo., with a capital stock of \$150,000. The incorporators are B. A. Niehoff, L. A. Niehoff, J. A. Niehoff, C. E. Fuchs, E. W. Schulze and E. H. Strecker.

A charter has been granted to the Wilson Elevator Company of Coffeyville, Kan. The capital stock is \$1,000 and the incorporators are A. E. Wilson, R. K. Long, V. D. Wilson, W. H. Shepherd, of Coffeyville, and T. E. Wagstaff, of Chanute, Kan.

SOUTHERN AND SOUTHWESTERN

E. G. Duckwall, a feed dealer of Louisville, Ky., is building an elevator.

John A. Connell has purchased the Weathers' grain business at Adel, Ga.

J. S. Carter has purchased the grain business of C. W. Jones at Conway, Ark.

The Oklahoma City Mill and Elevator Company is building an elevator at Cordell, Okla.

The Covington Grocery and Grain Company will build a new structure at Covington, La.

Brown & Roby, of Lawton, Okla., contemplate building an elevator at Chattanooga, Okla.

E. W. Wales & Co., of Oklahoma City, Okla., have awarded a contract for the erection of an elevator.

Martin Bros. have sold their mill and elevator at Sayre, Okla., to W. G. Phillips of Plainview, Texas.

The Clements Grain Company, of Waco, Texas, recently shipped 30 car loads of oats to Vicksburg, Tenn.

It is reported that the Seaboard Air Line Railroad will build a two-story concrete elevator at Columbus, Ga.

The Easton Grain Company of San Angelo, Texas, has overhauled its plant and installed new machinery.

Wallington Brothers, grain exporters of Wichita, Kan., will operate through Texas City, Texas, this season.

The Birmingham Grain Company, Birmingham, Ala., will expend \$3,000 repairing its warehouse recently damaged.

The Lipscomb Grain and Seed Company of Liberal, Mo., has completed a storage house and office building at Afton, Okla.

E. B. Murrell has sold his grain and feed business at Alamogordo, N. M., to Messrs. Briers of Stockton, Ala., who have purchased a new building.

The property of the Stark Grain Company at Texarkana, Texas, consisting of an elevator, a one-story brick building and a two-story iron-clad building, was sold at auction to J. E. Mugge, of San Antonio, Texas, for \$6,000.

The Coleman Grain and Mercantile Company, Coleman, Texas, will erect a fireproof warehouse, 50x100 feet in size, costing \$4,000. The company will install a small corn mill having a capacity of about 5,000 bushels hourly, also machinery for cleaning grain, and a sifter for meal and grits.

T. H. Black and O. L. Chivers of the Black-Chivers Grain Company, Dublin, Ga., have prepared plans for the erection of a three-story building. The basement will be used for storage purposes, the first floor for the company's grain store and the remainder of the building will be utilized for offices, etc.

The Kelly-Weber Company, wholesale grain dealers and grocers at Lake Charles, La., will double the capacity of its plant. A site adjoining the present plant was recently purchased and a contract will be awarded for the erection of a two-story brick building. The company recently increased its capital stock from \$50,000 to \$150,000.

The G. B. R. Smith Milling Company of Sherman, Texas, has completed a new elevator plant, consisting of 16 bins, 10 of them round and six square. They are of reinforced concrete construction, 65 feet high, with a capacity of 150,000 bushels of wheat. The working house is 98 feet high. The

new plant represents an expenditure of more than \$30,000. The Katy and Frisco railroads have completed switches to the plant.

An electric lighting plant has been installed in the plant of the Sanger Mill and Elevator Company, Sanger, Texas. New equipment has also been placed in the grain-cleaning department.

IOWA

M. O. Hocum has purchased an elevator at Gaza, Iowa.

R. Hammock, miller, will build an elevator at Carson, Iowa.

Paul Graves expects to build a 25,000-bushel elevator at Gruver, Iowa.

The Farmers' Industrial Union is building a \$6,000 elevator at Britt, Iowa.

K. S. Myers will rebuild the elevator at Milford, Iowa, recently destroyed by fire.

Rag Sharpnack and L. G. Kelly will engage in the grain and coal business at Modale, Iowa.

Stanley Kerr has purchased a half interest in Hugh McCoy's grain and seed business at Birmingham, Iowa.

The Farmers' Elevator Company has purchased the elevator at Portland, Iowa, formerly owned by H. C. Hamilton.

N. J. Edwards has retired from the grain business at Toronto, Iowa, and B. C. Horstman will continue operations.

The elevator of Charles Spike & Co., at Jesup, Iowa, has been razed and a new house will be erected in its place.

John Strain will erect a steel elevator at Nodaway, Iowa, on the site formerly occupied by the old Cummings Elevator.

The Farmers' Elevator at Ritter (R. F. D. from Sheldon), Iowa, was closed the latter part of July for the installation of repairs.

The Hunting Elevator Company of McGregor, Iowa, is building a new elevator at Doubleday (R. F. D. from Charles City), Iowa.

The Neola Grain Company is building an annex to its elevator at Collins, Iowa. The structure will be 24x44 feet in size and 28 feet high.

Taylor & Patton of Des Moines, Iowa, have taken over the grain business of L. G. Clay at Marshalltown, Iowa. Max Patton will have active charge of the business.

I. H. Merrick has bought the Northwestern Elevator at Eldora, Iowa, from John Barlow, and Mr. Merrick's son, Charles Merrick, will have charge of the house.

The Farmers' Elevator Company, of Industry, Iowa, held its annual meeting on July 14, and all the former officers were re-elected and Mr. Knudson was retained as manager.

M. Hennessy, who has been engaged in the grain, seed and coal business at Orient, Iowa, for the past 35 years, has sold his business to S. White and will retire from business activity.

The C. O. Patton Grain Company has succeeded the firm of Patton & Hasenwinkle at Oskaloosa, Iowa, C. O. Patton having taken over the interest previously held by the junior partner.

The elevators, coal sheds and lumber yards at Cleves, Iowa, belonging to the estate of the late Martin Janssen were sold at auction on July 15, when D. J. Peters, of Wellsburg, Iowa, secured the property for \$7,000.

The Junction Farmers' Elevator Company, recently organized at Grand Junction, Iowa, has elected the following officers: President, J. J. Gannon; secretary, C. L. Joy; treasurer, M. C. Howard; directors, James Blanshan and Henry Kreiger.

After thirty-one years of continuous activity in the grain business at Milford, Iowa, Rasmussen Bros. have sold their interests to Anderson & Alberts. Mr. Anderson is from Estherville, Iowa, and Mr. Alberts from Montgomery, Iowa.

The Pomeroy Co-operative Grain Company, Pomeroy, Iowa, recently held its annual meeting and declared a dividend of eight per cent. The officers are: Frank Peterson, president; G. H. Mohr, secretary, and N. C. Nielson, J. H. Baker, Chas. Swaline, August Anderson, Chas. Hartley, Henry Nieting and C. L. Drommer, directors.

The Nora Springs Farmers' Elevator and Supply Company has been incorporated at Nora Springs, Iowa, with a capital stock of \$5,000. The officers and directors are: A. L. Spotts, president; Peter Young, vice-president; W. E. Gaylord, secretary; Monroe Henry, treasurer, and F. K. Behue, S. M. Davis, W. G. Bell, C. H. Boeck and Ira Roberts, directors.

The Producers' Elevator Company, of La Porte City, Iowa, has completed its new house, which is 22x25 feet on the ground and 67 feet high, with an office building 10x24 feet in size. The elevator contains nine bins and has a capacity of 18,000 bushels. It is equipped with a gasoline engine for power, automatic scale, dump scale, manlift, etc. W. H.

Bickel, manager of the company, superintended the construction of the building.

The Trans-Mississippi Grain Company, of Omaha, Neb., has leased the elevator at Burlington, Iowa, owned by the Burlington Railroad, and the house has been prepared for operation. About a year ago, the Armour Grain Company planned to use the elevator for storage and overhauled the house, but the deal fell through.

OHIO, INDIANA AND MICHIGAN

Beach & Son have repaired their elevator at Cambria, Ind.

H. Starks will rebuild his elevator at Perry, Mich., recently destroyed by fire.

R. Ritter of Carsonville, Mich., has purchased the mill and elevator at Rawson, Ohio.

The Tyler Grain Company, of Wooster, Ohio, has installed a fanning mill in its warehouse.

The annual picnic of the Farmers' Grain Company, Bellevue, Ohio, was held August 13.

Work is progressing on the new elevator under course of construction at Breckenridge, Mich.

O. D. Moherman has leased the elevator at Nankin, Ohio, formerly operated by Wilbur Sherick.

A new elevator is under course of construction at Ithaca, Mich., and will be complete next month.

Fidler Bros. of Chicago have purchased the Davison Elevator at Bluffton, Ind., from J. W. Barney.

John Wickenhizer & Co. of Toledo, Ohio, have leased the elevator of C. W. Franklin at Townwood, Ohio.

Edward A. Johnson of Irving, Mich., has sold his mill and elevator to Manley Chase of Prairieville, Mich.

The Frank E. Nawlin Company, capitalized at \$50,000, has been incorporated at Albion, Mich., to deal in grain.

The M. S. Lockwood Elevator at Portland, Mich., has been purchased by the Webber State Savings Bank for \$9,300.

The Ohio Grain Elevator Company of Milford Center, Ohio, has increased its capital stock from \$25,000 to \$30,000.

The Okolona Grain and Stock Company of Okolona, Ohio, is remodeling its elevator and adding new storage capacity.

The Home Grain Company has installed a 15-horsepower motor in its elevator at La Grange, Ind., to replace its steam equipment.

The Henry County Grain Company has been incorporated at Deshler, Ohio, with a capital stock of \$10,000, by W. B. Grammer and others.

The Hyman Grain Company has sold its elevator and seed business at Napoleon, Ohio, to the Farmers' Grain Company, recently organized.

Work is progressing rapidly on the 75,000-bushel transfer elevator now under course of construction at Fostoria, Ohio, for the Fostoria Grain Company.

T. J. Connell has purchased a half interest in the elevator at Bentonville, Ind., and is now engaged in partnership with John Hazelrigg, of Cambridge City, Ind.

The Cass City Grain Company, of Cass City, Mich., will build bean and grain elevators at Greenleaf, a new town on the Grand Trunk Railroad, nine miles from Cass City.

John F. Parr of St. Johns, Mich., will remove his elevator across the tracks of the Grand Trunk Railroad to a new site. The removal is made necessary for the erection of a new depot at that place.

The office of the Farmers' Grain Company, Bellevue, Ohio, has been removed to the elevator on Kilbourne street, recently purchased by the company from the W. H. Gardner Grain and Mill Company.

The Ohio Elevator Company, Milford Center, Ohio, has taken over the elevators at Milford Center and Woodstock, Ohio, which will be under the management of H. P. Clouse, whose headquarters will be at Milford Center.

The Whalen Grain and Produce Company has been incorporated at Grand Rapids, Mich., with a capital stock of \$15,000. The incorporators are Edward Whalen, Bernard McCarthy, John Higgins and James McNamara.

The Grain Dealers' Saving and Loan Company has been incorporated at Indianapolis, Ind., with a capital stock of \$50,000. The incorporators are Mary Felder, Nellie Allemmorg, I. C. King, E. A. Wiley and C. A. McCotter.

E. W. Burkhart has remodeled his elevator at Fowlerville, Mich. A part of the house was dismantled and a two-story building is being erected in its place. The bean picking department will occupy the second floor of the building.

The old canal elevator at Peru, Ind., owned by the E. H. Shirk estate, has been condemned by the state fire marshal. The house was built in 1843, shortly after the Wabash and Erie Canal was constructed in that part of the state, and at that time

it was the largest elevator within a radius of 45 miles. The building is a frame structure with walnut timbers. It has not been in use for many years.

The Grand Rapids Grain and Milling Company, of Grand Rapids, Mich., has moved its offices and mill from 507-509 Monroe avenue to Scribner avenue, where it has reconstructed a new plant in property purchased several months ago.

The Farmers' Equity Union, recently organized at Arcola, Ind., has been capitalized at \$20,000. The union consists of 127 farmers in Lake Township and it is the plan to either buy or build an elevator, with headquarters at Columbia City, Ind.

Andrew Mohr and W. M. Mercer have formed a partnership at DeGraff, Ohio, for the purpose of conducting a general grain, coal and hay business. Mr. Mohr has been in the grain business at DeGraff for several years, while Mr. Mercer has conducted a hay business for some time, and it is believed that the merging of the two lines will be advantageous to both gentlemen.

The grain firm of O. P. Lenox & Son, Richwood, Ohio, dissolved partnership on July 15, and the elevator at Magnetic Springs, Ohio, was sold to W. H. Perry, of Richwood. The elevators at Richwood, Claiborne and Woodland will be in charge of R. W. Lenox, who has been associated with his father in the business for a number of years. O. P. Lenox has been in the elevator business at Richwood for the past 27 years but now retires from business activities.

WESTERN

An elevator is under construction at Hobson, Mont.

An independent elevator is being erected at Joplin, Mont.

The Farmers' Union Grain Agency has been incorporated at Pendleton, Ore.

The Forsyth Milling and Elevator Company has been incorporated at Forsyth, Mont.

The Farmers' Union Warehouse Company is building an elevator at Mohler, Wash.

The farmers' new 35,000-bushel elevator at La Crosse, Wash., is practically complete.

Olof Brusven of Litchfield, Minn., contemplates erecting an elevator at Choteau, Mont.

The Farmers' Elevator Company is building a 30,000-bushel elevator at Winona, Wash.

The St. Anthony & Dakota Elevator Company has arranged to build an elevator at Chester, Mont.

A farmers' elevator company has almost completed an 18,000-bushel elevator at Fleming, Colo.

The Mansfield Elevator and Warehouse Company, Mansfield, Wash., has installed a flour mill in its warehouse.

The McCabe Elevator Company will erect a 30,000-bushel elevator at Baltic (R. F. D. from Cut Bank), Mont.

The Rocky Mountain Elevator Company will build elevators at Choteau, Strathroy, Jersey and Bynum, Mont.

The Seattle Grain Company will operate at Wilsoncreek, Wash., this year, using a warehouse which has been idle for five years.

The Rocky Mountain Elevator Company has awarded contracts for the erection of elevators at Floweree and Virgelle, Mont.

The Columbia Elevator Company, of Minneapolis, Minn., has negotiated for a site in Ismay, Mont., on which it will erect an elevator.

The Missoula Mercantile Company, of Missoula, Mont., will erect a 50,000-bushel elevator on a site adjoining the Northern Pacific Railroad.

It is reported that McCabe Brothers will build a line of six elevators along the Plentywood branch of the Great Northern Railroad in Montana.

The Terminal Elevator Company has been incorporated at Spokane, Wash., with a capital stock of \$100,000, by B. F. Gill, A. G. Stall and others.

The W. C. Moore Milling and Elevator Company has been incorporated at Denver, Colo., with a capital stock of \$50,000, by W. C. Moore and others.

The Imperial Elevator Company and L. H. Ugland have each made application to the Great Northern Railway Company for an elevator site at Malta, Mont.

The Farmers' Elevator Company has been organized at Hingham, Mont., with a capital stock of \$10,000, and a 30,000-bushel elevator will be constructed.

The O'Neil Grain Warehouse at Creston, Wash., has been purchased by White, Dulaney & Co., of Seattle, Wash., and A. R. Lillengreen will continue as manager.

The annual meeting of the Waterville Union Grain Company, Waterville, Wash., was held last month and John Minnick and J. C. Brennessholtz were elected to the board of directors. The stockholders authorized the building of a cement vault in the office and voted to add to their property two

elevators, one at Supplee and one at Withrow, Wash.

The Montana Elevator Company and the Farmers' Elevator Company have each awarded a contract for the erection of a 30,000-bushel elevator at Lewistown, Mont.

Macdonald, Hale & Co. have been incorporated at Seattle, Wash., with a capital stock of \$70,000, by W. J. Macdonald, F. M. Hale and others, to deal in grain, hay, etc.

The Yellowstone Producers' Association may build an elevator in connection with a mill now under consideration for Laurel, Mont. It plans to incorporate for \$25,000.

The Odessa Union Warehouse Company of Odessa, Wash., has purchased the elevator erected several years ago by J. V. Schatz, for \$7,500. The house has a capacity of 100,000 bushels.

The Chehalis Grain Company, organized by A. E. Pollom and A. E. Brodeck, has opened a warehouse at Chehalis, Wash., and will do a wholesale and retail business in feed and flour.

The Farmers' Co-operative Elevator Company has been incorporated at Dutton, Mont., with a capital stock of \$10,000. The incorporators are Goodwin Odden, James Cheetham, C. H. Clark, V. M. Willis and Edward Markle.

I. I. Irwin of San Diego, Cal., has sold his warehouse and salesroom at Escondido, Cal., in which he has conducted a hay and grain business for several years, to Fred D. Hall. W. T. Brown and R. A. Agnew have taken over the hay and grain business.

The farmers of Asotin County, Wash., have purchased 500,000 grain sacks this season. The Farmers' Warehouse Company at Asotin sold 150,000 and the rest were secured from the Asotin Milling Company, the Interior Warehouse Company, the Kerr-Gifford Company and from the state penitentiary.

A new grain company has been organized at Colfax, Wash., to be known as the Manning Warehouse and Grain Company. The members of the firm are Seymour Manning, G. L. Campbell and Walter Richardson, the latter two having been connected with the grain firm of the Campbell-Sanford-Henley Company, whose headquarters are at Portland, Ore. The company has incorporated and purchased the Kerr-Gifford warehouses at Hay, Jerita, La Crosse, Pampa, Thera and Mockonema, Wash.

MINNESOTA AND WISCONSIN

C. O. Lekve has purchased the Imperial Elevator at Beltrami, Minn.

J. J. Davidson has leased the Farmers' Elevator at Evansville, Minn.

A farmers' elevator company has been organized at Hanley Falls, Minn.

D. J. McConnell is building an elevator on his farm, near Vesta, Minn.

The Lincoln Milling and Elevator Company, Merrill, Wis., has enlarged its elevator.

The Bennett Grain Company, Lakefield, Minn., has repaired and painted its elevator.

R. A. Jones of Wabasha, Minn., has purchased the Western Elevator at Plainview, Minn.

Chris Jacobson of Farwell, Minn., has opened the Atlantic Elevator at Elbow Lake, Minn.

N. Wilson has sold his elevator at Thiensville, Wis., to the Liebscher & Schaefer Company.

The Farmers' Elevator at Carlisle, Minn., was closed for repairs from July 13 to August 1.

The Luxemburg Milling Company is building a new elevator and warehouse at Luxemburg, Wis.

It is reported that the Benson Grain Company has purchased the St. John Elevator at Heron Lake, Minn.

H. H. Peters & Son of Wonewoc, Wis., are building an elevator at Grandmarsh, Wis., to take care of the rye crop.

The Osceola Mill and Elevator Company of Osceola, Wis., has increased its capital stock from \$50,000 to \$125,000.

The Farmers' Elevator Company, Lansing, Minn., has built a corrugated steel coal shed, having a capacity of three cars.

The annual meeting of the Moorhead Farmers' Elevator Company, Moorhead, Minn., was held on July 24, when one director was elected.

G. W. Welsh has rented the McQuaid Elevator at Benson, Minn., having resigned his position as manager of the Farmers' Elevator at that place.

The Farmers' Elevator Company has awarded a contract for the erection of a one-story building at Edgerton, Minn., to be 25x60 feet on the ground.

The Farmers' Elevator Company, Waseca, Minn., held its annual meeting recently, when the net profits for the year were stated to be 50 per cent.

The first annual meeting of the Franklin Farmers' Elevator Company, Franklin, Minn., was held recently and the following directors were elected: N. J. Olson, Geo. Forsyth, A. J. Anderson, Herman

Huhn, Martin Siegfried, J. C. Farrell and A. Danielson.

The Farmers' Co-operative Elevator Company has been incorporated at Neillsville, Wis., with a capital stock of \$20,000, by George E. Crothers and five others.

The Sheffield Elevator Company, Minneapolis, Minn., has received a permit to repair its elevator and build a concrete retaining wall at an expenditure of \$15,000.

The Andrews Grain Company of Minneapolis, Minn., has sold its elevator at Brandon, Minn., to the Brandon Farmers' Grain Company, a company recently organized.

At a recent annual meeting of the Farmers' Warehouse Association, at Echo, Minn., the company decided to purchase the Security Elevator for the storage of coarse grain.

The Gould Grain Company, formerly the Gould Elevator Company, an auxiliary corporation to the William Rahr Sons' Company, of Manitowoc, Wis., has increased its capital stock from \$75,000 to \$250,000.

A farmers' elevator company has been organized at Freeport, Minn., with a capital stock of \$25,000. The directors are Wm. J. Kleve, Herman Korte, Frank Ettel, Joseph Borgerding, Jos. Fabeck and John Luethners.

At a meeting of the directors of the New Farmers' Elevator Company at Mazeppa, Minn., James J. Darcy was re-elected president; P. Englehart, vice-president; A. J. Hodge, secretary-treasurer, and J. E. Miller, manager.

S. F. Douglas, president of the Great Western Grain Company, has sold the 1,500,000-bushel elevator at St. Louis Park, Minn., to B. F. Hales of Chicago. It is probable that the house will be used for barley and oats storage.

The Equity Elevator and Trading Company, of Breckenridge, Minn., elected the following officers at a recent annual meeting: President, F. O. Pierce; vice-president, H. L. Shirley; treasurer, Henry Kosek, and secretary, E. H. Mangskau.

The Farmers' Co-operative Elevator Company, at Pelican Rapids, Minn., has elected the following officers: John Sims, president; O. E. Moses, vice-president; P. E. Peterson, treasurer; Julius H. Holen, secretary, and Charles J. Swanson, manager.

The Farmers' Elevator Company has been organized at Tintah, Minn., with the following directors: Gust Ahlsten, R. C. Davison, J. G. Johnson, Geo. H. Putnam, J. P. Dahlquist, J. R. Lane and Victor Johnson. The company has purchased the Federal Elevator at that place.

The annual meeting of the Clinton Farmers' Elevator Company was held at Clinton, Minn., on July 15, when a 10 per cent dividend was declared. The officers were re-elected as follows: J. D. Ross, president; H. H. Tyler, vice-president; J. L. Erickson, treasurer, and H. A. Hewitt, secretary.

The annual meeting of the Equity Elevator and Trading Company was held at Wood Lake, Minn., recently and the following officers were elected: Wm. Wenholz, president; Wm. J. Timm, vice-president; H. Milbradt, secretary, and F. S. Payne, treasurer. A dividend of 6 per cent was declared.

The Thief River Falls Farmers' Exchange Elevator Company held its annual meeting at Thief River Falls, Minn., recently, and elected officers as follows: Chas. A. Evenson, president; T. K. Ryne-stad, vice-president; T. H. Bjerke, secretary; Oscar Sponheim, treasurer, and H. A. Halvorson, manager.

It is reported that the Great Northern Railway will postpone the construction of the proposed 3,000,000-bushel elevator to be erected in connection with the present plant at Superior, Wis., until next year. Work on the structure will start early in the spring so that the house will be ready to handle the crop of the following fall.

Two new grain companies, in which the same men are incorporators, filed articles of incorporation at Duluth, Minn., last month. They are the International Elevator Company, capitalized at \$250,000, and the McCabe Bros. Company, capitalized at \$50,000. The incorporators are: William J. McCabe, Milton and S. R. Clark of Duluth; James McCabe of Glasston, N. D., and George H. McCabe of Grafton, N. D.

The annual meeting of the Kerkhoven Farmers' Elevator Company was held at Kerkhoven, Minn., on July 21, when a dividend of 10 per cent was declared on the capital stock and five members of the board of directors were elected as follows: J. H. Lewis, T. G. Berge, Fred Lindeman, O. G. Hough and George F. Baker. The date of the annual meeting was changed from July to the first Saturday in November.

The Pillsbury Elevator at Minneapolis, Minn., having a capacity of 700,000 bushels, was sold on August 1, by the Marfield Grain Company to Andrews & Co., of the Minneapolis Chamber of Commerce. The house is a frame structure and was erected by Charles A. Pillsbury before the period of steel and concrete storage tanks. The house passed

from the hands of the Pillsbury Flour Mills Company several years ago.

The McKindley Grain Company has been incorporated at Duluth, Minn., with a capital stock of \$50,000. The incorporators are James N. McKindley, Joseph A. Schumacher and Stephen P. Gray.

The Blue Earth Farmers' Elevator Company has been organized at Blue Earth, Minn., with a capital stock of \$15,000. The incorporators are August W. Bartz, William Kohlmeier, Alfred D. Ogilvie, Walter Oelke, T. Edward More, August Werner, Frank B. Silliman, James R. Snyder, August E. Neuhalfen, Lawrence H. Murphy, John A. Warner, Walter Carey, Ernest Lier, James McCloskey, Gustave Gartzke and John H. Buggy.

THE DAKOTAS

A new elevator is under construction at South Shore, S. D.

An elevator is under course of construction at Bowbells, N. D.

A co-operative elevator company may be organized at Dallas, S. D.

J. I. Jondahl is building an elevator on his farm near Galesburg, N. D.

The Farmers' Elevator Company of York, N. D., has installed a steel bin.

George Boelter has sold his elevator at Tuttle, N. D., to Lybeck & Nelson.

New elevators are to be established at McHenry, Fordville and Rugby, N. D.

The Cargill Elevator Company has completed its new elevator at Grace, N. D.

McCabe Brothers have expended \$1,500 improving their elevator at Hamilton, N. D.

The Western Grain Company is building a 30,000-bushel elevator at Havelock, N. D.

The Cargill Elevator at Walden (R. F. D. from Page), N. D., has been dismantled.

A 40,000-bushel elevator is under construction at Vashti (R. F. D. from Pingree), N. D.

A meeting of farmers was held at Grafton, N. D., to consider the establishment of an elevator.

Gunder Lunde has purchased the Ostroot Elevator Company's house at Lake Preston, S. D.

A new elevator will be erected at Canova, S. D., on the site of the one destroyed by fire last fall.

A dividend of 10 per cent has been declared by the Farmers' Elevator Company of Barney, N. D.

The Chester Farmers' Elevator Company, Chester, S. D., contemplates leasing or buying an elevator.

J. E. Scott & Co. have awarded a contract for the erection of a 30,000-bushel elevator at Hecla, S. D.

It is reported that William Fox and three others will build elevators at Fairmount, N. D., this season.

The Empire Elevator Company has dismantled its elevator at Spain, S. D., and will remove it to Havelock, N. D.

Work has begun on the reconstruction of the Empire Elevator at Scranton, N. D., which burned some time ago.

Farmers in the vicinity of Guelph, N. D., held a meeting recently to consider the formation of an elevator company.

The Shane Bros. & Wilson Company is building a 50,000-bushel elevator in connection with its mill at Arlington, S. D.

At the annual meeting of the Clark County Farmers' Elevator Company, Clark, S. D., a dividend of 30 per cent was declared.

Three new elevators are under course of construction at Veblen, S. D., owing to the building of the Fairmont & Veblen Railroad.

The Crown Elevator Company has discontinued operations at Selby, S. D., and sold its elevator and equipment to the Equity Union.

The Farmers' Elevator Company of Edinburg, N. D., held its annual meeting on July 14, and declared a dividend of 10 per cent.

The Farmers' Elevator Company, Valley Springs, S. D., held its annual meeting on July 15, when all of its former officers were re-elected.

The annual stockholders' meeting of the Ashton Elevator Company, Ashton, S. D., was held on July 24, when the board of directors was re-elected.

The Farmers' Land, Loan and Grain Company has been incorporated at Freeman, S. D., by Sam Walter of Freeman, E. W. Aisenbrey of Menno, S. D., and others.

At the annual meeting of the Farmers' Elevator Company, at York, N. D., the following officers were elected: J. C. Baker, president; James McCarty, vice-president; G. H. Runcorn, secretary and manager.

The annual meeting of the New Farmers' Grain Company, Alexandria, S. D., was held recently, and a 10 per cent dividend was declared. The following officers were elected: President, Peter Arend; vice-president, Dean Blackman, and secretary-treasurer,

L. V. Plagmann. J. F. Pinches will continue as buyer.

The Farmers' Elevator Company has been incorporated at Albee, S. D., with a capital stock of \$5,000, by Thomas Street, G. M. Engebretson and others.

Gust Shoutz of Parkers Prairie, Minn., contemplates building an elevator in one of the new towns on a new extension of the Soo Railroad in North Dakota.

Preliminary steps have been taken to reorganize the Farmers' Co-operative Elevator Company at Hudson, S. D., and \$3,500 additional stock has been subscribed.

Farmers in the vicinity of Dallas, S. D., have taken steps preliminary to the organization of an elevator company, and an elevator will soon be established.

The Crosby Farmers' Co-operative Elevator and Trading Company, Crosby, N. D., held its annual meeting on July 21, and a dividend of over \$17,000 was declared.

The Farmers' Elevator Company of Forest River, N. D., has declared a dividend of 10 per cent. Edson Bates is president of the company and Charles Gillham, secretary.

The Forbes Equity Exchange has been incorporated at Forbes, N. D., with a capital stock of \$20,000. The incorporators are C. C. Talbot, Geo. Hasinger and D. D. Moore.

At the annual meeting of the Farmers' Elevator Company, Dwight, N. D., a dividend of 20 per cent was declared. Edward Erickson is president and M. R. Olson, secretary.

The Raleigh Equity Exchange has been incorporated at Raleigh, N. D., with a capital stock of \$10,000. The incorporators are N. W. Gillis, Chas. F. Hotzel and R. C. Christenson.

The recently organized grain firm, Albrecht, Johnson & Halter, will build a 50,000-bushel elevator at Flasher, N. D., to be complete about September 20. The contract has been awarded.

The Miller Grain Company has been incorporated at Page, N. D., with a capital stock of \$35,000. The incorporators are J. C. Miller and E. M. Miller of Page, and R. E. Young of Hope, N. D.

Antonsen & Dittes have sold their elevator at Ambrose, N. D., to the Farmers' Co-operative Elevator Company. The former firm expects to open a line of elevators in Saskatchewan, Canada.

Thieves entered the Farmers' Elevator at Milbank, S. D., recently, and carried away a small amount of money. The Empire Elevator was also entered but nothing of value was secured.

The Equity Farmers' Elevator Company, of Max, N. D., has elected new directors as follows: J. M. Lee, Ed. Evenson, Roy Thompson, Thos. Jacobson, Joe Lakaduck, A. C. Freitag and James Reed.

The Bentley Equity Exchange has been incorporated at Hettinger, N. D., with a capital stock of \$25,000. The incorporators are F. F. Wehsner, F. L. Hunkler and Geo. E. Crary, all of Bentley, N. D.

The Ramona Farmers' Elevator Company, Ramona, S. D., has elected officers as follows: J. H. Groce, president; D. J. O'Connell, vice-president; F. O. Palmer, treasurer; A. T. Hartwich, secretary.

The Farmers' Elevator Company of Howard, S. D., has awarded a contract for the erection of an elevator on the site of the house destroyed by fire last year. Carl J. Erickson will manage the business.

The Farmers' Elevator Company has been organized at Colgan, N. D., with officers as follows: Martin Monson, president; Albert Lahum, vice-president; Frank Bakewell, secretary, and Henry Riede, treasurer.

C. E. Larson, H. D. Bloss and W. D. Paton, who have been operating a grain business at Dickey, N. D., as a partnership under the firm name of the Dickey Grain Company, have recently incorporated under that name.

At a special meeting of the stockholders of the Farmers' Elevator Company, Dimock, S. D., they decided to either build an addition to their house or purchase another elevator to handle their increasing business.

The Farmers' Grain Company has been incorporated at Grandin, N. D., with a capital stock of \$25,000. The incorporators are Wm. F. Gast, Cleveland, Ohio; C. M. Owen, Minneapolis, Minn., and A. L. Gunkelman, Grandin.

At the annual meeting of the stockholders of the Farmers' Elevator Company, at Woonsocket, S. D., a dividend of 10 per cent was declared. All the old officers were re-elected, and W. F. Brewster will continue as manager.

The annual meeting of the Farmers' Elevator Company was held at Vienna, S. D., on July 19, and a dividend of 30 per cent was declared. Peter McLaren, Sr., resigned his office as president owing to poor health and G. C. Jensen was appointed in his place. C. O. Rosengren was also elected a member of the board of directors and a dividend of 38

per cent was declared. The company is building new coal sheds.

The annual stockholders' meeting of the Farmers' Elevator Company was held at Park River, N. D., last month and the following directors were elected: Frank Harris, C. E. Reinertson, Thos. Johnson, D. G. McKay and D. Aitken.

The Farmers' Elevator Company at Maxbass, N. D., held its annual meeting on July 21, and the following board of directors was elected: Fred Rother, T. J. Galvin, Wm. Martin, John Haakinson, R. S. Stair, Chas. Pease and M. Fossum.

The directors of the Farmers' Elevator Company, LaMoure, N. D., declared a dividend of 25 per cent at their recent annual meeting and the following officers were elected: L. O. Tvette, president; Henry Hodem, secretary, and Paul Adams, treasurer.

The stockholders of the Farmers' Elevator Company, Buffalo Springs, N. D., was held recently and officers were elected as follows: President, Henry Kern; vice-president, J. J. Joyce; directors, Geo. Olstad, G. A. Silvius, Jos. Loder, Andrew Senty and Chas. Kelner.

The Clay County Stock and Grain Company has been incorporated at Vermilion, S. D., with a capital stock of \$500,000. The incorporators are D. J. Stafford of Sioux City, Iowa; O. A. Anderson of Pierre, S. D.; S. D. Lamb and A. W. Hayser of Minneapolis, Minn.

The Farmers' Elevator Company of Buttzville, N. D., held its annual meeting on July 15, when the following officers were elected: President, Frank Peters; vice-president, Jacob Walters; secretary, Alfred Asahiem; treasurer, John Halvorson. A dividend of 40 per cent was declared.

The Farmers' Co-operative Elevator Company of Brookings, S. D., has purchased the elevator of Bingham Brothers. The directors have elected the following officers for the ensuing year: President, Frank Telkamp; vice-president, F. F. Baldrige, and secretary, Herbert Blakely.

The annual meeting of the stockholders of the Farmers' Elevator Company, at Antler, N. D., was held on July 19, when a 10 per cent dividend was declared and the following officers elected: Alex Cranston, president; Ralph Walker, vice-president; and Aug. W. Krueger, secretary.

The stockholders of the Farmers' Elevator Company, New Rockford, N. D., held their annual meeting on July 26, and the following officers were elected: President, F. E. Reed; vice-president, A. J. Ford; secretary-treasurer and manager, F. S. Dunham, and buyer, Geo. M. O'Connor.

The Montpelier Farmers' Elevator Company, Montpelier, N. D., held its annual meeting last month and declared a dividend equal to 50 per cent. The following are the officers: Jules Naze, Sr., president; Eldo Chinberg, vice-president; Alf Schollander, secretary-treasurer, and Henry Gullickson, manager.

CANADIAN

The Ogilvie Elevator at Melita, Man., has been repaired.

An elevator is under course of construction at Neepawa, Man.

Philip Byrne, Byrne, Sask., will enter the grain business this fall.

The new elevator of Dawson & Rodger at Pathlow, Sask., was opened for business this month.

The North Star Elevator Company of Wilkie, Sask., has installed improvements in its elevator.

Joseph Ward & Co., wholesale grain, grocery and produce dealers, have registered at Montreal, Que.

Thomas Thompson, of Thompson & Sons, Grain Exchange, Winnipeg, Man., has returned from a four-months' visit in California and Victoria.

The National Elevator Company has completed a 30,000-bushel house at Cereal, Alta., and the local union of the U. F. A. is planning to build an elevator.

The Smith Grain Company has been incorporated at Winnipeg, Man., with a capital stock of \$40,000, to conduct a general grain, milling and elevator business.

The International Linseed Oil Company, Ltd., has finished negotiations for the location of a \$750,000 plant at Britannia Park, on the outskirts of Moose Jaw, Sask.

The Quaker Oats Company has built a new elevator in connection with its plant at Saskatoon, Sask., which increases the storage capacity to 325,000 bushels.

The Denault Grain and Provision Company, Ltd., has been incorporated at Sherbrooke, Que., with a capital stock of \$150,000. Among the directors is G. H. Denault of Fort William, Ont.

The British-American Elevator Company is building two new elevators at Pleasant Valley, near Melfort, Sask., and several other houses will be constructed along the Melfort-Humboldt branch.

A number of farmers in the vicinity of Treherne, Man., met recently and considered the question of erecting a new elevator. It was decided to take immediate steps in the matter and erect a 25,000-bushel house.

It has been announced that the Grand Trunk Railway Company will build an elevator at Point Edward, Ont., to replace the house recently destroyed by fire. The new house will be of steel and concrete construction and of greater capacity than the former elevator.

Antonsen & Dittes of Ambrose, N. D., contemplates building a line of elevators in Saskatchewan. According to plans now under consideration, they will purchase two houses in towns in the vicinity of Saskatoon, and will erect two others at other points. Mr. Antonsen will have active management with headquarters at Saskatoon.

NEWS LETTERS

CINCINNATI

BY JOHN S. DOBBS.

The Cincinnati merchants have been very busy for the past thirty days handling new wheat from Ohio and Indiana, which with very few exceptions has been of excellent quality and while southern millers have not come into the market to any great extent, there were numerous export contracts to be filled and there has been a good demand for all offerings with the prices ranging from 87½ to 90 cents for No. 2 wheat and only a slight discount being demanded for No. 3, which was too damp to grade No. 2.

* * *

Local distillers and feed dealers did not anticipate an advance in corn and consequently were compelled to supply their wants at prices seemingly beyond all reason and for the past week it has not been so much a question of price as it has been a question of getting sufficient grain to keep mills in motion and new high record prices are being recorded almost daily.

* * *

The early arrivals of new oats show poor quality because the grain is light and chaffy, although the color is good, and as local stocks are not heavy it is quite likely that we will have a steady advancing market on oats throughout the season.

* * *

Quite a number of local dealers have established themselves in the new Chamber of Commerce Build-

ing and their number is being added to every week or so and it is to be hoped that the entire trade will soon be located in the same building, as such an arrangement would work out to the advantage of the entire trade.

* * *

The local retail trade has almost been at a standstill for the past week, with a teamsters' strike which seems as far from a settlement as when it was begun, as both sides are stubborn in their demands.

PHILADELPHIA

BY E. R. SIEWERS.

Walter K. Woolman, head of the S. C. Woolman & Co. grain firm and a director in the Commercial Exchange, has returned from a two weeks' outing at one of the well-known Pocono Mountain resorts.

* * *

Director Barnabas Devitt of the Commercial Exchange, a well-known grain broker, for 31 years a member of the organization, who died suddenly of uræmia on his 67th birthday, was one of the most straightforward business men among his fellows. A. B. Clemmer is looking after his affairs.

* * *

The friends of Senator Porter McCumber here believe that having brought up the Federal inspection of grain as his pet bill in the Sixty-third Congress, like the unfortunate widow of old, he will get the measure passed if he remains senator long enough,

and are reminded that an applicant for liquor license in this city was turned down for ten years, and was finally granted his demands by the sitting judge as a reward for his patience and persistence.

* * *

E. E. Delp of Bourbon, Ind., who recently visited his eastern headquarters here, is making arrangements for an extended export trade when the Panama Canal opens.

* * *

Joseph C. Adam, of George Hay & Co., flour merchants, and C. A. Steele of H. J. Mulford & Co., have gone abroad.

* * *

The grain, feed, flour, hay and straw business is exceedingly quiet at present.

TOLEDO

BY E. F. BAKER.

Receipts of grain have not been coming in as freely as desired, but farmers are still busy getting in their grain and considerable wheat is going to the interior mills, which are eagerly snapping up all the new wheat they can get. It is also believed that farmers are holding on to their wheat, being dissatisfied with the prices offered. The wheat and oats crop of northwestern Ohio is more than satisfactory, both as to quantity and grade. The corn throughout Ohio and Indiana is reported badly fired and no predictions are yet being made as to what the crop will eventually be, although farmers generally are expressing considerable fear, unless more rain should follow. Receipts for the past week aggregate 294,000 bushels of wheat, 64,800 bushels of corn and 323,800 bushels of oats. The shipments are: Wheat, 72,500 bushels; corn, 21,700 bushels; oats, 45,800 bushels. Wheat closed today at \$0.88; cash corn at \$0.74½, and cash oats at \$0.43¼@¾. Hay quotations on the Toledo market are: No. 1 timothy, \$11.50@12.50; No. 2 timothy, \$10.50@11.00; light clover, mixed, \$10.00@11.00; No. 2 clover mixed, \$6.50.

* * *

George B. McCabe, at one time a prominent Toledo grain and seed man and member of the Toledo Produce Exchange, died at the Soldiers' Home at Sandusky, Ohio, Wednesday, August 6. Following the death of his wife four years ago, Mr. McCabe retired from active business and went to the Soldiers' Home at Sandusky in order to be with his old comrades of civil war days. Mr. McCabe was a dealer on the local market thirty years ago and has been associated with various grain firms, at one time being a member of the firm of Southworth & Co. The funeral was held Thursday at Sidney, Ohio, the old homestead of the deceased.

* * *

That the law prohibiting the sale of seed adulterated in the proportion of one grain to each 500 grains is obnoxious and should be repealed by the legislature at its next session, was the gist of a resolution adopted by the members of the Tri-State Grain and Seed Dealers' Association at a meeting held at the Toledo Produce Exchange recently. It was stated that a test suit has already been filed on this law in southern Ohio. The seed dealers contend that they want clean seed and desire to see a higher standard for all seed maintained in Ohio, but declare that the present law is too stringent even for the purchaser.

* * *

The Ohio Elevator Company, with a capital stock of \$25,000, has taken over the elevators at Milford Center and Woodstock, Ohio. They will be under the management of H. J. Clouse.

* * *

The Napoleon Grain and Stock Company was recently organized at Napoleon, Ohio, when 150 farmers met at the court house for the purpose of organizing the mutual company. The capital stock is placed at \$20,000, there being 800 shares at \$25 per share. The Napoleon State bank was made the depository of the concern. Following are the officers and directors: President, Charles Danenberg; vice-president, Samuel Farrison; secretary and treasurer, Fred Riekeberg. The officers with Fred Bockelman and Leonard French made up the board of directors. The concern has begun active work and this week purchased the Hyman Grain Co.'s elevator of Napoleon, the consideration being \$14,000. The deal will be consummated August 18, when the new owners will take possession.

* * *

Jacob Diehl, member of the firm of Miller & Diehl, flour and feed dealers, died recently at his Erie street home. Beside a widow and daughter, of Toledo, he left a sister, who resides in Germany. Diehl had been a resident of Toledo for nearly half a century.

* * *

The members of the Soft Wheat Millers' Club met in this city recently, Bert Ball, secretary of the Crop Improvement Committee of the Council of Grain Exchanges, being present. Mr. Ball's visit

had for its object the talking over of the plan adopted in many states for encouraging farmers to use a uniform seed best adaptable to the soil conditions. It is hoped by this method that a practically standard grain will be grown in all sections of the soft winter wheat district and better crops and prices will be the result.

* * *

The Hulshizer rolling mill at Newark, Ohio, was recently destroyed by fire, entailing a loss of \$25,000, partially covered by insurance.

* * *

William Schneider, a millwright in the employ of the Philip Schmidt Co., of Sidney, Ohio, was severely injured recently at the Botzum elevator just as he had completed the installation of new machinery. His left arm was caught in the corn elevator and broken.

* * *

Reports from Shelby County, Ohio, show that the wheat crop of the county is higher in average than for many years past, though not as many acres were sown as usual.

* * *

During July a big campaign was waged in Paulding County, Ohio, to boost alfalfa raising. The Paulding Commercial Club worked hand in hand with the experts and some rousing meetings were held. Among the speakers were C. H. Allen, H. L. Eichling, Prof. A. G. Graham, J. R. Ross and H. J. Magorsen.

* * *

The hay market has just been re-established at Dayton, Ohio, following the big flood of March. The market has been established under a new ordinance passed in May, which provides that the hours for the conduct of the market are from 7:30 a. m. to 3:00 p. m. No grain or hay can be sold at retail after 3 o'clock. Dealers are not allowed to buy at the market at any time, but after 3 o'clock farmers are privileged to deliver what hay or grain they may have left to dealers. No corn, timothy or mixed hay shall be sold inside the city limits unless it is taken to the public hay market and weighed under municipal supervision.

BUFFALO

BY ELMER M. HILL.

Nothing that would indicate the cause of the explosion that wrecked the Husted Milling Company's plant on June 24, and resulted in the death of 43 men, was brought out at the inquest before Judge Thomas H. Noonan in City Court. More than three score survivors and other witnesses were called to testify. Many expressed the belief that the explosion was caused by an explosion of grain dust in one of the shafts, but just what caused the dust to explode no one appears to know. Experts were called but they were unable to give an accurate explanation. Among the officers of the Husted Milling Company who were called to testify were: Charles Bullock, an expert chemist employed by the company; Clifford M. Husted, a graduate of Cornell, where he qualified as a chemical engineer; E. M. Husted, president of the company; Thomas C. O'Brian, assistant superintendent of the mills, and others. Clifford M. Husted is the son of the president of the mills. Young Husted was the general superintendent. Charles Bullock, a chemist, testified that he was working in the laboratory on the afternoon of the explosion. He said no gases had been generated in the laboratory that afternoon and the witness was positive the explosion did not happen in that section of the big milling establishment.

Clifford M. Husted, the general superintendent, testified many of the windows were opened on the afternoon of the explosion. Necessarily there was dust, but there was machinery for sucking it up, he said. In describing the various milling machines, the witness went into detail in regard to everyone which was in no way a trade secret. It had never been called to his attention that sparks emanated from the machinery. He then went on to describe the electric lighting system. In warehouse C, where the explosion was thought to have happened, he said incandescent lights were used, and the feed wires were carried in conduits except the wires operating electric fans in a room where women were employed. Switch engines, he said, did not run into the buildings. Engines were operated daily along one side of the great milling structure but from evidence brought out, it was not apparent that sparks from a locomotive ignited the grain dust and caused the explosion. Sidney T. Wilson, state factory inspector for New York State, testified that the Husted Milling Co. had always complied with every recommendation for safety appliances in its mills, made by the New York State factory department. Other representatives of the state factory investigating commission also testified to this point.

* * *

The Churchill Grain & Seed Company, of Buffalo, has made a complaint to the Interstate Commerce Commission against the West Shore, New York

Central, Boston & Albany and New York, New Haven & Hartford railroads, in which it alleges misrouting of recent shipments of wheat from Clarence, Erie County, New York, to Provincetown, Mass. The shipper intended that the grain should travel via the West Shore and New York Central roads and to be delivered to the New York, New Haven & Hartford Railroad at Harlem River, an interchange point, in which case the consignee could order the car into New Haven or to other points along the road where they may have wished to use it. The complaint alleges that no attention was paid to the routing called for, but that the car was taken direct to Provincetown by some other route and that it became necessary to bring the car back from Provincetown to New Haven, where it was unloaded by the consignee. The railroad charged \$104 for the service and the petition recites that the charges should have amounted to only \$65.

* * *

Statistics showing the receipts of wheat, corn, flax and other grains from the upper lakes will no longer be kept by the marine department of the United States customs in Buffalo. Hereafter all statistics will be kept by the bureau of statistics of the department of commerce and labor in Washington. For years the grain merchants and others interested in the grain commerce at this port have taken the records of the marine department of the United States customs as official, and under the new ruling that all statistics will be kept in Washington, it will seriously handicap the local grain men in keeping a record of the weekly and monthly receipts. The Buffalo Corn Exchange, however, keeps the weights of all grain arriving at the individual elevators in the harbor and the Lake Carriers' Association keeps a record of the amount of grain elevated.

* * *

The Cattaraugus County Crop Improvement Association has received a check for \$1,000 from the Council of Grain Exchanges of America. The first suggestion for the organization of the farmers in Cattaraugus County for the purpose of improving crops was effected and an agricultural expert employed \$1,000 for the purpose as soon as the organization was affected and an agricultural expert employed and put to work in the field. A check for \$1,500 will be received this fall from the board of supervisors of Olean, Cattaraugus County, which was conditional on the grant of the \$1,000 by the grain exchanges. The crop improvement association is also in receipt of \$50 a month from the state of New York and \$15 a month has been voted them by the Olean Chamber of Commerce, which has been regularly paid since May. Professor H. E. Babcock has been retained by the farmers as the agricultural expert. He is now engaged in making an examination and inspection of the county and conducting experiments with the co-operation of the farmers in various parts of the county to determine the value of certain crops which have not heretofore been grown to any large extent in this section.

AGRICULTURAL YEARBOOK FOR 1912

The nineteenth volume of the U. S. Department of Agriculture Yearbook has recently been printed and the edition will as usual be distributed by senators, representatives and delegates in Congress as the Department's allotment is reserved for its official correspondents and others rendering valuable voluntary service. The previous volumes, aggregating 9,000,000 copies, have been thus distributed and those who received copies, knowing their value, will doubtless be expecting the new volume, which contains 781 pages, 60 half-tone plates, 10 lithographic plates, and 19 text figures.

The form of the Yearbook being prescribed by law, there is little variation from year to year in its general form and style. The report of the secretary for the fiscal year 1912, which occupies the first 259 pages, has already appeared in separate form. Twenty-four special articles prepared by direction of the secretary that relate to the subjects of general interest which have received special consideration during the year by experts in the respective bureaus of the department, and have not heretofore been published, will be issued as separates or extracts, so as to make them available for a wide distribution to those not securing a copy of the Yearbook.

The portion devoted to the appendix comprises a review of weather conditions, the names of the officials in charge of agriculture, statistics relating to agriculture in aspects of production, acreage, and value of crops, of the number and value of farm animals, of price of farm products at the farm and in the wholesale market, of foreign trade in farm and forest products, and of railroad rates for the transportation of principal farm products.

Beginning with the earliest years for which statistics were obtained, tables are given exhibiting the acreage, production, value, prices, exports, and imports of the corn crops of the United States, and for all or most of the items mentioned, of the crops of wheat, oats, barley, rye, buckwheat, potatoes, cotton, tobacco, flaxseed, rice, and cane and beet sugar.

ASSOCIATIONS

INDIANA GRAIN DEALERS' OUTING

Charles B. Riley, secretary of the Indiana Grain Dealers' Association, has announced that the grain dealers, seed dealers and millers of the Hoosier State have perfected arrangements for a three days' outing and general good time at Lake Maxinkuckee (P. O. Culver), Ind., to take place on September 5, 6 and 7, with headquarters at the Palmer House. No formal invitations have been issued, but the association sends out a general call to all interested in the grain, seed and milling trade to take advantage of this excellent opportunity of developing fraternal and social relationships.

There will be no formal program nor general business, but the visitors will be at liberty to introduce subjects of interest to the trade in any manner they desire. It is hoped that there will be a number of visitors from the terminal markets and that all will bring their families and friends. Lake Maxinkuckee is famous for its fishing, bathing, boating and other aquatic amusements, while it is one of the most beautiful resorts in northern Indiana. Also, Culver is a very interesting place and the location of the Culver Military School. It is reached by the Vandalia Railroad and is located 35 miles north of Logansport and 12 miles south of Plymouth, Ind. Splendid automobile roads lead to the resort from all directions. Advance hotel reservations may be secured by writing the Palmer House, Culver, Ind.

GRAIN DEALERS' BANQUET AT DANVILLE, ILL.

A joint meeting of grain dealers, representing the Illinois and Indiana associations, was held at Danville, Ill., on August 5. There was a good attendance and great interest was shown in the reports of the present condition of corn, the yield of oats and business prospects. General reports indicated a yield of about 10 to 12 bushels for oats, of very light quality, and there was a variety of opinions in regard to the growing corn, mostly of a pessimistic character, although a few believed that rains might develop a fair crop. It was found that there was very little old corn in the hands of producers. Grain subjects in general were discussed by all present.

At a former meeting, it had been suggested that a "get together banquet" be held at Danville, sometime, for the benefit of dealers on both sides of the state line and to encourage fraternal feelings among dealers. This subject was discussed to some length with the result that there was a unanimous vote for a banquet of country grain shippers to be held in Danville on Thursday, October 2, further details to be announced later.

Invitations will be extended to the trade, including representatives of the trade papers, receivers, track buyers, brokers and traveling representatives of grain merchants, and acceptances will be requested as the committee will only make arrangements for those who plan to attend. The following committee was appointed to have general charge of the banquet: Fay R. Current, of the firm of J. M. Current & Sons, Homer, Ill.; Frank Jones, manager of the Farmers' Elevator Company, Ridge Farm, Ill., and P. J. Wolfram, Marshfield, Ind. Secretary C. B. Riley, of the Indiana Grain Dealers' Association, Indianapolis, and Secretary S. W. Strong, of the Illinois Grain Dealers' Association, Urbana, were present and each tendered to the committee his assistance.

NEW YORK STATE HAY DEALERS' ASSOCIATION

The eighth annual convention of the New York State Hay Dealers' Association was held at Syracuse, on August 1 and 2, in the Hiawatha room of the Onondaga Hotel. In point of attendance and interest manifested it was the most successful convention ever held by the association. Between 400 and 500 delegates listened to the address of welcome after the meeting had been called to order by President Mulkin. Acting for Mayor Schoeneck, William Rubin, assistant corporate counsel of Syracuse, welcomed the visitors to the city in a very happy vein. D. S. Wright, of Weedsport, N. Y., responded and the secretary's report and the appointment of committees followed.

Edward Vreeland, of Brooklyn, N. Y., read a memorial address in behalf of those members of the association who had passed away since the last convention and B. A. Dean, of Auburn, N. Y., followed with an address on "Good Business Policies—How to Foster Them." A most interesting paper was then read by H. A. Bascom, of Boston, who reviewed the happenings of the National Hay Association at Peoria. The subject of "Grades" was then convincingly handled by W. W. Bloomingdale, who is associated with a large hay receiving firm in New

York City. The evening of the first day the delegates were tendered a banquet in the Onondaga Hotel, at which Leonard Gibson, New York representative of the "Hay Trade Journal," was toastmaster.

An important address of the second day was delivered by C. A. Coleman, of Lyons, N. Y., on "Alfalfa." Mr. Coleman was followed by H. C. Jones, of Baltimore, who spoke on the subject, "Can the Hay Business Be Made More Profitable?" "The Future of the Hay Business" was then given by Cyrus H. Bates, of Boston, who was followed by Dr. William K. Wickes, of Syracuse, who contrasted modern business methods of hay dealers with an ancient fabled character in his interesting address on "Little Boy Blue and His Modern Counterpart."

The subject of "Transportation" was ably handled by E. A. Dillinbeck, of New York City, and W. S. Leavitt, of Boston; Edward C. Baker, of Providence, and W. A. Huey, by proxy, of Philadelphia, spoke on "How Hay Is Handled in the Eastern Markets."

Officers for the ensuing year were elected as follows: President, Charles J. Watson, of Dundee; vice-president, J. P. O'Hara, of Moravia; secretary and treasurer, Willis Bullock, of Canajoharie; directors, F. C. Mulklin, of Friendship; C. A. Coleman, Lyons; J. A. Ginder, Schenectady; Charles M. Adams, Weedsport, and Jos. N. Reinhardt, New York City.

ILLINOIS RESOLUTION ON CERTIFICATES OF CARS

The nineteenth annual convention of the Illinois Grain Dealers' Association, held in Peoria, June, 1912, adopted the following resolution:

"Whereas, many of our markets furnish the shipper with a certificate of car conditions in addition to the regular certificates of weight and inspection; and,

"Whereas, it is a well established fact that in filing claims the addition of a certificate of the physical condition of the car is invaluable in fully establishing the validity of the claim; therefore, be it

"Resolved, that the secretary of this association is hereby directed to correspond with those markets not now furnishing certificates and endeavor to secure the enactment of a rule which will result in that market furnishing the shipper with a certificate showing the physical condition of the car."

Secretary S. W. Strong has sent out a circular letter giving the results of his correspondence as follows:

Baltimore.—This market furnishes a weight certificate on which the car number, initial, weight and contents, and also the seal record, and full description of condition, are given.

Cincinnati.—A complete record of car condition and the seal record is furnished on the weight certificate.

Chicago.—The matter has been presented upon the grain committee and the weighing department of the Chicago Board of Trade at various times, but without definite result up to the present time.

Cleveland.—A record of condition and seals is preserved and when car is leaking or out of condition a report is furnished, otherwise not unless requested by the shipper.

Detroit.—The inspection certificate shows the seal record and car condition and the weight certificate bears a record of the seals and condition at the time of unloading.

Evansville.—W. H. Small & Co. say, "It is the custom at our elevator to make certificates of weight on all inbound stuff, showing not only the condition of the car, but car seals, numbers and all the information that could possibly be desired."

Indianapolis.—This market has offered to co-operate with the Indiana and Illinois shippers in obtaining a physical examination of all cars inspected in that market for a fee of approximately ten cents a car.

Milwaukee.—The matter of physical condition, report and seal record is under consideration by the committee on weights and inspection, and it is practically certain that a system will be inaugurated which will include a complete seal record.

New York.—This market furnishes and keeps a record of a report on car condition, the fees being \$1 where they do the weighing and 75 cents where they do not.

Philadelphia.—Record of car condition is preserved and furnished the shipper at his request, but no seal record is kept, as they say it would mean the employment of more men, and at present they can see no necessity for it.

Terre Haute.—At this market the Vigo Elevator furnishes a full report on the back of the weight certificates.

Toledo.—The condition of the car and the seals are noted; but the initial and number of arrival seals are not taken. But they will do so if other markets furnish the same.

New Albany.—A complete record is preserved and furnished on the weight certificates, including the seal numbers upon arrival.

ASSOCIATION BRIEFS

The annual report of Chief Scale Inspector W. H. Starr of the Kansas Grain Dealers' Association has just been issued. Copies may be had upon application.

The twenty-first annual convention of the National Hay Association will be held at Cedar Point, O., Hotel Breakers, during July, 1914. The exact date will be given later.

The following firms have been received as members of the Illinois Grain Dealers' Association: O'Brien & Lambert, Morse (R. F. D. from Buda), Ill., and the Oreana Grain Company, Oreana, Ill.

The executive committee of the National Hay Association has suspended the following members: E. Trammell & Co., Norfolk, Va.; J. M. Brandt, Enid, Okla., and Sullivan & Martindale, Las Animas, Colo.

A conference of the millers and elevator operators of middle Ohio territory is being held at Mansfield, O., today, August 15, in the Southern Hotel. Grain trade legislation, uniform practices, the scoop-shoveler, associations, scale inspection, crop improvements and kindred subjects will be discussed. The central Ohio territory includes the following counties: Hardin, Wyandot, Seneca, Sandusky, Crawford, Marion, Logan, Union, Delaware, Morrow, Richland, Ashland, Knox and Huron.

COURT DECISIONS

[Prepared especially for the "American Grain Trade," by J. L. Rosenberger, of the Chicago Bar.]

VALIDITY OF CONTRACTS FOR INDEFINITE QUALITIES

When there are negotiations in reference to a sale, they must be such as will bind both parties, or neither will be bound. Unless both are so bound that either can maintain an action against the other for a breach, neither will be bound. It follows, the United States Circuit Court of Appeals, Fifth Circuit, says, in *T. B. Walker Manufacturing Company vs. Swift & Co.* (200 Federal Reporter, 529), that, if a seller agrees to deliver such quantities of any commodity as a buyer may choose to order, but the buyer does not agree to order any quantity of such commodity, the contract will be wanting in mutuality and void. The buyer not being bound, the seller will be free to disregard the agreement. To hold otherwise would enable the buyer to give orders and take the commodity if prices fall, and to give no orders and refuse to take it if prices should rise. It is axiomatic that such a contract is wanting in mutuality and void. But where the buyer has an established business, it is competent for the seller to contract with him to furnish him with such supplies as may be needed by him during a certain period. In such a case both parties will be bound, the one to furnish and the other to take what is needed. Business neces-

sities require contracts of this class, though more or less indefinite, to be upheld. In such cases it can be ascertained, with some degree of certainty, the quantity needed, and the intention of the parties, it is presumed, is to contract in reference to such quantity. The business being established, the purchase is an incident to it, and the purchase will be reasonably necessary, whether the prices of the article rise or fall. Such contracts, are, therefore, held valid.

The Farmers' Elevator Company, Emery, S. D., has made an assignment to its creditors.

The Western Grain Company, Fort Smith, Ark., has been cleared of a suit charging violation of state laws.

Adam Molz, a hay and grain dealer of Washington, Kan., was fined \$50 and costs on a charge of using false weights last month.

The Barry Grain Company, of Albany, N. Y., has filed a voluntary petition in bankruptcy, showing unsecured debts of \$8,615 and nominal assets of \$1,011.

George M. Weaver has been appointed receiver for the Allegheny County Agricultural Association, Pittsburgh, Pa., following the filing of a bill in equity against the company by Nicholas Nolte and Charles Ehle. The plaintiffs allege that they are creditors in the sums of \$2,000 and \$300 respec-

tively and that the association is unable to pay its debts.

The Wolcottville Elevator Company, of Wolcottville, Ind., has filed a petition in bankruptcy, stating assets to the amount of \$1,846.52 and liabilities \$4,145.56.

William L. Holaday and Ernest L. Reiman, grain and feed dealers of Terre Haute, Ind., were arrested this month on warrants charging them with violating the state laws prohibiting the sale of untagged feed stuffs.

Sivert Hegstad, agent for the Imperial Elevator Company, at Petersburg, N. D., was sentenced for a term of one year in the state penitentiary at Bismarck, N. D., having pleaded guilty to a charge of embezzlement.

C. E. Fletcher, of Royal, Ill., has brought suit against the Big Four Railroad, to recover damages resulting from the burning of a car of corn when the elevator at Rumlper, Ill., was destroyed by fire some time ago.

The Bank of Lind has filed complaint against several defendants in an action involving the Farmers' Warehouse Company of Lind, Wash. The suit concerns several notes, aggregating almost \$20,000, by reason of an agreement said to have been signed by residents of Lind and vicinity in which they agreed to guarantee the payment to the bank of

all notes or obligations for which the Farmers' Warehouse Company might become indebted to the bank not to exceed \$40,000.

A. G. Van Patten, Van Patten, Ill., promoter of the Farmers' Elevator Company and formerly a member of the elevator firm of Van Patten & Hess, has filed a petition in bankruptcy, stating his assets to be \$49,000 and liabilities \$122,000.

E. N. Redfield, of Wilmore, Kan., has instituted suit against the Kemper Grain Company for \$1,338 damages, claiming that his credit was damaged when his wages were garnished for a debt made up against him. The plaintiff alleges the grain company sued him for \$44.67 but later dismissed the garnishment and paid the costs. However, he claims that while the suit was pending the company garnished money to the amount of \$182.41 due him from the Davis Commission Company.

C. H. Workman, administrator of the estate of Theodore E. Bill, deceased, has filed suit against the Goemann Grain Company, Mansfield, Ohio, for \$25,000 damages. Mr. Bill lost his life in an accident while in the employ of the grain company, and the petition states that his death was caused by the neglect of the defendant; also that the company had not paid into the state insurance fund the premiums provided by the act of the general assembly covering the dependents of killed employees.

of Canadian and English clover and meadow hay. Those in general use for horses are Canadian No. 1 timothy and Canadian timothy and clover mixed. For heavy draft horses the good grades of American and Canadian hay are used, but for race horses and hunters and the lighter breed of horses English hay is preferred. There is no duty on the importation of hay into the United Kingdom.

THE ST. LOUIS HAY MARKET

The Martin Mullally Commission Company, St. Louis, Mo., reports August 1: "Our hay market during the past week ruled firm with an excellent demand for all grades. Receipts were only fair in amount, being 216 cars, compared with 208 cars the preceding week. The offerings of tame hay consisted mostly of new timothy and clover mixed. The condition of the new hay is very good, and is mostly clover mixed. Buyers took most everything offered on arrival, causing a free movement and the market kept well cleaned up right along. New timothy hay is ranging in price from \$15 to \$16.50. New clover mixed is selling from \$13 to \$15, according to quality and amount of mixture. The market is in good condition for fresh arrivals, and we advise prompt shipments. Pure clover hay is in light offerings and the demand good, particularly so for the best grades, and is ranging in price from \$12 to \$15.

"Prairie hay is ruling steady and firm. Receipts light, demand right good. Fresh arrivals are meeting ready sale at full prices, and the market is kept well sold up and is practically bare of all grades at the close today, and in good condition for fresh arrivals, and we advise prompt shipments. The offerings of alfalfa hay are lighter, and are ruling firmer, though there is not any change to note in prices. The movement here, however, has been very free, and the market is keeping well cleaned up. We look for a continued good demand on alfalfa, owing to the light crop of hay in this vicinity."

ALFALFA MEETING IN OHIO

In the accompanying illustration is shown a part of the big throng of five thousand Ohio alfalfa growers who assembled recently to do honor to Joseph Wing, father of Ohio alfalfa. Some few years ago, Mr. Wing sent from the West a small quantity of alfalfa seed to his father in Ohio. The seed was planted, but with little success. Later on Mr. Wing returned and demonstrated that alfalfa can be successfully grown on Ohio farms. Since that date, alfalfa has spread over the state with splendid results, and Mr. Wing, who was responsible for its

HAY AND STRAW

J. C. Smith of Jackson, Miss., has opened a wholesale and retail feed store at Columbus, Ga.

The Grier Feed and Grocery Company, a new organization, has taken over the business of J. W. Burson at Cornelia, Ga.

It is reported that the hay crop of Skagit County, Wash., has been estimated at between 20,000 and 25,000 tons this year, all clover and timothy.

The alfalfa mill at Cottonwood Falls, Kan., has opened under the management of R. O. Blain of Great Bend, Kan. The plant was recently overhauled. Mr. Blain is also manager of the alfalfa mill at Saffordville, Kan., which has started operating.

Galbraith, Bacon & Co., of Seattle, Wash., have been awarded a contract for furnishing 1,000 tons of hay for the use of the Government in the Philippines. J. B. Stevens, of Tacoma, Wash., received a contract for the delivery of 1,500 tons to the same destination.

The M. Schwartz & Sons Feed Company has been incorporated at St. Louis, Mo., with a capital stock of \$10,000, to engage in a general wholesale and retail hay, feed and grain business. The incorporators are Morris Schwartz, Edwin C. Schwartz and Irving M. Schwartz.

William H. Moore has engaged in business on his own account as a broker in hay and straw at New York City, with offices in the Hay Exchange Building. Mr. Moore has been identified with the hay business for a number of years, representing various firms, recently with Joseph T. Roberts.

Edward Drescher and associates have purchased land at East St. Louis, Mo., on which a new concrete mill will be erected by the Alfalfa Horse and Mule Feed Company, a company recently organized at that place. The plant will cost approximately \$150,000 and about 150 men will be employed in the establishment.

The Public Service Commission at Olympia, Wash., has established new rules for the grading of hay. Hereafter hay grading as "choice timothy" may contain as much as 10 per cent of other tame grasses, five per cent formerly having been the limit of adulteration. No. 1 timothy may contain as much as 15 per cent of red top or other wild grasses, or 25 per cent of alfalfa or clover.

Washington farmers are interested in circular baled hay, a number of bales in this form having been placed on the market. The product is baled when green by being wound around a shaft, which is withdrawn when the bale is complete, leaving a circular opening which, it is claimed, serves to ventilate the hay. The binding is done with twine and the bales weigh from 50 to 100 pounds.

Albert Miller & Co., Chicago, report August 8: Offerings of both timothy and prairie so far this week have been very light, while demand for all kinds has been good. New timothy, which is now arriving in excellent condition, is selling readily. In fact it is now preferred by most dealers to the old, and it will be only a few days before the trade will pay more for the old than the new. We advise shippers to pay no more now for old hay than

for new. Arrivals very small, only an occasional car of Kansas or Oklahoma arriving. A few cars of state prairie arriving and meeting a ready sale. Only an occasional car of Iowa, Minnesota or Nebraska arriving. The prairie market at present very bullish and should warrant shipments. New rye straw quite plentiful with fair demand.

THE ENGLISH HAY MARKET

A large quantity of hay is produced in England but, according to recent consular reports, there is always a good demand for the imported article,



OHIO ALFALFA GROWERS LISTENING TO ADDRESS BY JOSEPH WING

principally in the large towns, especially for Canadian hay, when it is cheaper than the home product. The United Kingdom produces an average annual yield, roughly estimated between 9,000,000 and 14,000,000 tons. In 1912, England imported 70,583 tons of hay; in 1911, 121,516 tons, and in 1910, 99,014 tons. At present, there is an embargo on the importation of all hay from all hay-supplying countries, except Norway and Sweden, Canada, and the United States.

It is believed that there would be a good market in England for alfalfa as a milk-producing stock food, if the prices could be kept fairly low, that is about \$1.80 to \$2.40 the ton above that of Canadian hay. Some time ago a small quantity of alfalfa was imported from Chile but there is now an embargo on Chilean hay. It is said that London is a good market for this product, as there are more stall-fed cattle in that district than in the north. Experiments have been made with alfalfa from Texas but high freight rates so increased the price that the product was unsalable in England.

The grades of hay used for cattle are soft kinds

inception has been termed, "one of Ohio's four greatest agricultural institutions."

HAY IN PITTSBURGH

Samuel Walton & Co., Pittsburgh, Pa., report August 1:

"The receipts of hay have not been large yet apparently sufficient arriving to meet the demand with the market barely holding steady. Lower grades continue to be very unsatisfactory and hard to move without making considerable concession in the price. The receipts of rye straw have increased, hence the market is not so firm and prices somewhat lower. The receipts of oats straw are light and a better demand, hence prices have advanced. There is some inquiry for fine prairie packing hay. We continue to have a good supply of oats with the market barely holding steady; prices are a little lower. There continue to be light receipts of car corn, not sufficient arriving to meet the demand; the same may be said of shelled corn, consequently there is considerable advance in prices."

COMMUNICATED

[We invite correspondence from everyone in any way interested in the grain trade on all topics connected therewith. We wish to see a general exchange of opinion on all subjects which pertain to the interest of the trade at large, or any branch of it.]

ADDRESS OF DRIER CONCERN WANTED

Editor American Grain Trade: We beg to ask if any readers can furnish us with the address of the concern making the Richmond Drier for drying seed corn. We have been in correspondence with two firms in Chicago making such machinery, but have heard there is another device called the "Richmond" and before placing orders would like to investigate this.

Yours truly,
CHAUNCEY P. COY & SONS.

Waterloo, Neb.

PROTEST AGAINST SHRINKAGE REDUCTION

Editor American Grain Trade: We have sent the following letter recently to the Interstate Commerce Commission:

We have received notice from railroad companies of the issuance of Supplement I-J of Western Trunk Line Committee. Also C. B. & Q. GFO-3333-K, ICCA-396, effective June 1, which requires a reduction of one-quarter of 1 per cent on corn, and one-eighth of 1 per cent on all other grains in cases of claims made against the railroad company for loss in transit.

We are herewith presenting our protest against permitting this circular to remain effective. We have never been able to convince ourselves of the justice of any claim that is made in support of the theory of "natural shrinkage" or "normal shrinkage." It is true that in some kinds of weather, grain will shrink in transit. It is also true that in other kinds of weather, grain will absorb moisture and increase in weight in transit, and if we were to accept the theory of "natural shrinkage" in the handling of grain, it would only be necessary to follow the argument to its logical conclusion, and it would be ascertained that if we re-weigh the grain often enough, it will all disappear like trick cards in a magician's hands. The conclusion is so absurd as to prove the unreliability and inaccuracy of the theory of "natural shrinkage," and we most respectfully protest against a continuation of the effectiveness of the above mentioned circular.

We believe an imposition is being practiced on the shipping public and hope that influence may be exerted in such way as to secure the withdrawal of this circular.

Yours very truly,
BEAL-VINCENT GRAIN COMPANY.

Omaha, Neb.

CAUSE AND PREVENTION OF EXPLOSIONS

Editor American Grain Trade: Since the recent explosions, we have had so many inquiries as to the cause and prevention of these explosions that we have prepared the following statement, which we believe covers the matter fully.

The number of mills and elevators that have been destroyed by dust explosions within recent years resulting in not only heavy loss of property, but the loss of many lives, has so emphasized the danger from the explosion of grain dust that insurance companies, both fire and liability, as well as the owners of such properties, have become deeply interested in such appliances and facilities that are in existence to reduce or eliminate the danger from this source.

In view of the fact that appliances have been in existence to improve the conditions and avoid such losses, when these appliances are not in use, the courts have held the owners of such properties liable for negligence and have shown a disposition more and more to hold the owners of said establishments under heavy obligation for the loss of life incurred. Inquiries have come to us from various interested sources as to what means we have to offer for the prevention of such explosions and what are the safety devices we have to offer for such purpose.

The dust collecting system which we manufacture and install in grain elevators and like establishments has been an evolution of the past number of years and has been installed in a large number of elevators, especially of the middle west and south, and its merits and value has been so recognized by the elevator engineers of the middle west, that for a number of years a new terminal elevator has not been considered complete in its equipment without a dust collecting system, and they have invariably specified such a system for new terminal houses within this territory. As a result, so far as we know, there has been no fire in an elevator west of Chicago and St. Louis that has resulted in a dust explosion within recent years.

Our dust collecting system consists of dust separators connected directly with the various grain cleaning machinery, one or more suction fans with piping system to take the dust from these various dust separators and from all initial points where

dust arises and from which it is practicable to take the dust before it escapes into the elevator—such as the boots connected with the elevator legs, the elevator heads or garners, grain belt hoppers, and so forth, and providing floor sweeps throughout the elevator on the various floors through which any dust that does escape into the elevator can be swept up and systematically fed into these sweeper connections. The dust so collected is delivered automatically to the furnaces by furnace feeders or to any other destination as may be desired. The connections where dust is received from the various initial points mentioned are so made that only the light floating dust is taken into the system. The system is so arranged that any grain that may be taken into the system through the floor sweeps is separated from the dust and no grain is delivered with the dust to the final destination. The merits of this system, if handled properly and systematically, are as follows: It catches the dust at the initial points; it keeps a clean elevator; it makes better conditions for the employees; it reduces the fire risk; it reduces the danger to life. You will note from the above description that the system is so connected as to take the dust at the initial points throughout the elevator from which the dust arises, and any partial system—such as dust separators connected with grain cleaning machinery, or a suction fan with a sweeper system—is not a complete dust collecting system and does not give the full benefits of one.

You will notice that we have limited the territory in which these systems have been installed mainly to the middle west and south. The reason for this is that there have been influences at work in Chicago and the eastern portion of our country that have practically prohibited installing such a system in their elevators. The grain exchanges in some of the cities within this territory are responsible for this situation, for they have refused to permit dust collecting systems in grain terminal houses because they claimed that more or less grain was taken into the system at the expense of the owner of the said grain.

If the system is properly installed and operated, there is no basis of fact for this claim. Several years ago a bill was introduced in the Minnesota Legislature prohibiting the operating of dust collecting systems in grain terminal houses because the claim was made that it robbed the farmers of their grain. The legislative committee to which this bill was referred made a thorough examination of elevators in Minneapolis in which systems were in operation and the result was they brought in a report to the effect that the system did not rob the shipper of grain and instead of condemning, they highly recommended the system for its merits.

We want to call your attention to the following two significant facts:

First—All of the explosions of recent years in grain elevators, so far as we know, have been either in the vicinity of Chicago or throughout the east in the territory where the said rulings of the grain exchanges have been in existence.

Second—To our knowledge there has never been a fire resulting in an explosion in any elevator equipped with a complete dust collecting system of our installing.

Yours very truly, THE DAY COMPANY.
Minneapolis, Minn.

VETO OF ANTI-CAR-SWEEPING BILL

Editor American Grain Trade: It was with some surprise that those engaged in buying, selling and handling grain in the State of Illinois learned of Governor Dunn's veto of the Anti-Sweeping bill. For my part I am well persuaded that had his honor, the Governor, been familiar with the conditions that prompted the introduction of this excellent measure he would have promptly approved it. In this connection perhaps we, in the grain trade, are somewhat to blame for not intelligently informing him. It would seem that Governor Dunn labored under the erroneous impression that the bill was a railroad measure and did not concern the shippers of grain.

A brief outline of our efforts to eliminate the after-sweeping nuisance in the Chicago district might be appropriate at this time.

About fifteen years ago, when I first became identified with the Weighing Department of the Chicago Board of Trade, after-sweeping privileges were being farmed out by representatives of certain grain carrying lines for considerations of greater or lesser amounts. In some cases the considerations were represented by monthly payments, while in other cases the after-sweeping graft was given out

on a percentage basis. A thorough investigation of the matter, which I made at the time, convinced me that after-sweeping, whether by organized agencies or by trespassers, was conducive to serious abuses, and, therefore, I determined to abolish the evil, but as the after-sweeping of cars had proved to be a very lucrative business, not only to the sweepers, but to those who were interested in farming out the privileges, I met with much opposition to my endeavors. However, after a long-drawn-out and rather strenuous fight we finally succeeded in abolishing all forms of organized after-sweeping in the Chicago Terminal. But the after-sweeping that was being done by trespassers, while not so serious in its results, was a much more difficult problem to handle for the reason that the courts would not—at any rate did not—co-operate with the movement. Boy, women and men sweepers were repeatedly brought before the magistrates only to be discharged. In some cases the judges have even threatened to punish the officers for arresting these sweepers.

To make matters worse, the sweepers were often encouraged by unscrupulous people who bought the grain for a small part of its real value. Our efforts, in consequence, were also directed to the buyers of the stolen grain. I say stolen grain for the reason that a very large part of the so-called sweepings came from loaded cars. In fact, when a trespasser was caught coming out of railroad yards with grain he usually was successful in securing his dismissal by claiming that he swept the grain from empty cars. While it is true that the Juvenile Act, together with the establishment of the Municipal Court, has given us some relief, yet without a specific law prohibiting after-sweeping and providing suitable punishment to guide the courts, as has proven so effective in the State of Minnesota, the judges are reluctant to mete out punishment to trespassers caught with grain in their possession which they claim either to have swept out of empty cars or to have bought from others claiming to have secured the grain by after-sweeping. I am well convinced that thefts of grain amounting to thousands of dollars each year could be effectively prevented by an after-sweeping law along the lines of the measure that Governor Dunn has just vetoed on the grounds that the provisions of the present criminal code sufficiently cover the subject. As a matter of fact, those who caused the introduction of this after-sweeping bill did not have the protection of railroads in mind, but drew up the measure for the protection of the grain trade.

Our first effort to secure relief from the costly after-sweeping nuisance was the introduction in the City Council of Chicago of an ordinance which would have made it a misdemeanor, punishable by fine, for any unauthorized person to sweep grain cars. This measure was referred to the Judiciary Committee, which granted us a hearing. At that hearing certain members of the committee stated that they had constituents who made their spending money sweeping cars, while other members said that the city lacked the authority to enact an anti-sweeping ordinance. Failing to secure relief from the City Council we turned to the Illinois Legislature, but again we were unsuccessful. That was two years ago. At the last session of the Legislature some of the Peoria grain men caused the measure to be reintroduced with some additions to cover police or justice courts, and with the assistance of influential grain men of the state the bill was finally passed only to be vetoed by the Governor. It is to be hoped that we will meet with greater success two years hence.

Yours very truly, H. A. FOSS.
Chicago, Ill.

MILWAUKEE NEWS

Editor American Grain Trade: New crop grain has begun to arrive at Milwaukee. The first car of 1913 crop barley arrived July 24, graded No. 3, test weight 45 pounds, consigned to W. M. Bell & Co., and was sold at 62 cents. The first car of new wheat arrived July 29, graded No. 2 hard, test weight 62 pounds, and was sold by Fagg & Taylor at 89 cents. The first car of new rye was received July 29, graded No. 1, test weight 57 pounds, and was sold by Rialto Elevator Company at 63½ cents. The first car of new oats arrived August 2, graded standard, and was sold at 43 cents.

Alex McDougall, of Chicago, a member of the Milwaukee Chamber of Commerce for a number of years, died July 8.

The inspected receipts of rye at Milwaukee during the month of July were largely increased over those of July, 1912, as indicated by the following figures:

July, 1913	124 cars
July, 1912	20 cars

The rate of interest charged on advances for the month of August, under the provisions of Sections 8 and 9 of Rule 32, has been placed by the Finance Committee of the Chamber of Commerce at 6 per cent per annum.

Yours very truly, H. A. PLUMB,
Secretary, Chamber of Commerce.
Milwaukee, Wis.

TRANSPORTATION

The Chicago, Milwaukee & St. Paul Railroad has announced a reduction of six cents per 100 pounds on the rate on grain from Montana to the Pacific Coast.

Wheat and flour rates between Puget Sound and the Orient, which were recently reduced by the Trans-Pacific Tariff Bureau, are to be restored August 16, according to report.

The Interstate Commerce Commission will hear the protest of the Peoria Board of Trade against the proposed increase in rates on grain from Illinois points, on September 11.

The Morgan Line is now quoting a rate of 14 cents per 100 pounds on corn from New Orleans, La., to Havana, Cuba. This is a reduction of four cents per 100 pounds from previous rates.

The Railroad Commission in Texas has authorized the Pecos Valley Southern Railway Company to add a differential of 1½ cents to articles taking hay or grain rates and 1¾ cents to flour and articles taking flour rates.

The Michigan State Bean Jobbers' Association has filed complaints with the Interstate Commerce Commission concerning proposed tariff rates of the railroads. The Michigan Hay and Grain Dealers' Association has presented a similar protest.

The State Railway Commission of Montana and representatives of the Northern Pacific and Milwaukee roads, at a recent conference, agreed upon a rate of 30 cents per 100 pounds, instead of 35 cents, on grain from Bozeman, Mont., to Minneapolis, Minn.

Representatives of the Farmers' Educational and Co-operative Union and traffic officials of northwestern railroads held a conference at Spokane, Wash., when a reduction in rates on wheat from the Inland Empire to St. Louis, Mo., and points in Tennessee was discussed.

A hearing on the proposed advance in grain rates from northwest Iowa to Chicago will be held before Commissioner Prouty in Chicago on September 11. On September 8 the case of the Iowa Northern and other railroads to compel joint rates on interstate business will be heard at the same place.

The Farmers' Grain Dealers' Association of Illinois has filed a complaint with the Illinois Railroad and Warehouse Commission against the Atchison, Topeka and Santa Fe Railroad and other lines in which it is alleged that unreasonable increases have been made in the rates on grain.

Following a protest against milling-in-transit rates by the millers of Lockport, N. Y., the Interstate Commerce Commission decided that rates on wheat milled in transit and shipped through Chicago were unreasonable. It was pointed out that the all-rail rate on wheat from Minneapolis to New York via Chicago was 26 cents, and on flour 25 cents.

The T. B. Hord Grain Company of Central City, Neb., has filed a complaint with the Railway Commission alleging that rates on grain on the Union Pacific Railroad at Chapman, Central City, Clarks, Havens, Silver Creek and Duncan are too high and are discriminatory as compared with rates at stations north and south of the stations named in the complaint.

The rules under which carload shipments of seeds were handled at Chicago, through the freight houses of the carriers, for a charge of one cent per 100 pounds, was cancelled effective Aug. 1, 1913. The rule will be re-published, however, effective Sept. 1, 1913, except that it will be modified to the extent of making the charge 1¼ cents per 100 pounds. The action of the carriers in cancelling the rule entirely was taken through a misapprehension.

For the second time, the Interstate Commerce Commission has refused to grant proportional rates to Sioux City, Iowa, in comparison with rates at terminal grain markets. The Commission announced its findings in the case of the Sioux City Terminal Elevator Company and others versus the Milwaukee and other roads. The case was a rehearing and the Commission adhered to its previous ruling. The directors of the elevator company plan to continue the fight.

The Interstate Commerce Commission issued a decision in the case of the Toledo Produce Exchange against the Ann Arbor and other railroads holding that joint through rates with transit at Toledo should be established to cover the movement of grain and grain products by all reasonably direct routes to points in the East. It was noted that the domestic and export rates on ex-lake grain forwarded from Toledo to New York should be established in the relation of 78 from Toledo to 60 from

Buffalo, the customary differentials to other destinations being observed.

Reductions in freight rates on grain, grain products and flax seed between stations in Montana and Idaho and points in Illinois, Indiana, Iowa, Minnesota and the Dakotas on the Great Northern, and also from Montana and Idaho to Seattle, Tacoma and other Puget Sound points, have been established in a new tariff issued by the railroad. The rates eastward became effective August 5, and those westward August 10. The reductions range from one cent to five cents per 100 pounds.

The Oregon State Railroad Commission has begun an investigation of the demurrage rates of railroads, a charge having been made by the various lines that the charge of \$2 a day for cars held beyond the time limit by shippers was insufficient and encouraged a certain class to hold cars during busy seasons. The railroads declare that \$3 a day should be the charge. It was also alleged that the scarcity of cars that prevails during busy seasons was due to the holding of cars by shippers.

CHANGES IN RATES

These changes in rates affecting grain and grain products are furnished to the "American Grain Trade" by the General Traffic Association, Inc., 715 Fourteenth Street, N. W., Washington, D. C. If any of our readers feel that the present rates or those which are about to become effective are unjust, excessive or discriminatory, this company has agreed to take care of such matters before the Interstate Commerce Commission, at only a nominal cost.

Since our last issue the following new tariffs have been filed with the Interstate Commerce Commission, naming rates on grain and grain products, with the I. C. C. numbers, effective dates and rates in cents per one hundred pounds. (A) denotes advance and (R) denotes reduction.

Northern Pacific

I. C. C. No. 5370, Aug. 10. From Billings, Mont., to San Francisco and Oakland (Long Wharf), Cal., wheat, flour, bran, oat groats, mill feed, shorts and middlings, 43½ cents; (R) to Santa Barbara, Cal., 65 cents.

I. C. C. No. 5340, Aug. 15. Flour from Portland, Ore., and Vancouver, Wash., to Victoria, B. C., 20 cents.

I. C. C. No. 5386, Interstate, Aug. 20. Grain from Cable, Minn., to Bemidji, Minn., 9½ cents; grain and articles taking same rate between Duluth, Minn., Superior (East End and Central Ave.), Wis., and International Falls, Minn., 16 cents (rates will not apply from or to intermediate points); flour and mill feed from Casselton, N. D., to Bemidji, Minn., 12 cents; flour, grain and mill feed from Wadena, Minn., to Bemidji, Minn., 7.9 cents; flour from Grafton, N. D., to Tenstrike, 16½ cents; Blackduck, 17½ cents; Northome, 19½ cents; Big Falls, 22 cents, and to International Falls, Minn., 24 cents.

I. C. C. No. 5387, Aug. 20. Flour from Fergus Falls, Minn., to Fargo, N. D., 8.5 cents; malt and malt sprouts between St. Paul, Minneapolis, Minnesota Transfer, Stillwater, Minn., and rate points, and Cloquet, Fond du Lac, Duluth, Minn., Superior (Central Ave.), Superior (East End), 5 cents; Brule, Iron River, Washburn and Ashland, Wis., 7½ cents.

Supplement 3 to I. C. C. No. A1781, Sept. 5. Flour from Ruthton, Minn., to Racine, Sherman, Swanwood, Des Moines, Garden City, Cambridge, Iowa, and other Iowa points, 19 cents (R).

Chicago, Rock Island and Pacific

Supplement 13 to I. C. C. No. 9271, Aug. 11. Between St. Paul, Minneapolis, Minnesota Transfer, South St. Paul, Minn., and Pipestone, Minn., flaxseed, 13½ cents; wheat, 10½ cents; corn, rye, oats and barley, 10 cents.

Supplement 15 to I. C. C. No. C9121, Aug. 13. Flour from Atchison, Leavenworth, Kan.; Kansas City and St. Joseph, Mo., to Sioux City, Iowa, 14.75 cents.

Supplement 11 to I. C. C. No. C9377, Aug. 13. To Algiers, Gretna, Iowa; Galveston and Texas City, Texas, Mobile, Ala., New Orleans, La., Port Chalmette, La., and Westwego, La., for export from Clinton and Hammond Junction, Okla., wheat, 24½ cents; corn, 22 cents; from Blood Spur and Pitman Spur, Kan., to Mobile, Ala., New Orleans, and Port

Advances in the rates on wheat and grain products in carloads from Oklahoma City and stations in Oklahoma west of that point to Memphis, Tenn., proposed by the Rock Island Railroad were suspended on July 26 by the Interstate Commerce Commission from July 31 until November 28. Also, advances in the rates on flaxseed from St. Paul, Minneapolis and Minnesota Transfer to Fredonia, Kan., proposed by the Atchison Railroad, were suspended from August 1 until October 29.

It has been announced that effective September 1, 1913, the Chicago, Rock Island & Pacific Railroad, in connection with rates on grain and grain products from its stations in Iowa, Minnesota and South Dakota to Memphis, Tenn., and Mobile, Ala., has provided routing via the Pittsburgh, Cincinnati, Chicago & St. Louis Railroad and the Southern Railroad. This route applies via Chicago, with transit privileges, in addition to the routing via the Chicago & Eastern Illinois Railroad, which has been in effect.

The Chicago Board of Trade will soon file complaint with the Illinois Railroad and Warehouse Commission against several railroads, including the Atchison, Topeka and Santa Fe, Chicago and Alton, Chicago and Eastern Illinois, Illinois Central, and Wabash, concerning switching charges. The companies are accused of refusing to absorb switching charges on Illinois grain in the Chicago switching district, and as a result, it is alleged, the Chicago Board of Trade and the grain shippers and producers throughout the state have been discriminated against.

Chalmette, La., and Westwego, La., for export, wheat, 25 cents; corn, 22 cents.

Supplement 2 to I. C. C. No. C9506, Aug. 25. Between Little Rock, Iowa, and Ellsworth, Minn., and Kansas City, St. Joseph group, flaxseed, wheat, wheat flour, 23 cents; corn, 18 cents.

I. C. C. No. A9526, Sept. 1. From Davenport, Iowa, to Memphis, Tenn., wheat, 16 cents; corn, 16 cents; to New Orleans, La., wheat, 23 cents, and corn, 22 cents.

I. C. C. No. C9537, Sept. 11. Starch between St. Paul, Minneapolis, Minnesota Transfer, South St. Paul, Minn., and Pipestone, Minn., 17 cents; linseed oil from St. Paul, Minneapolis, Minnesota Transfer and South St. Paul, Minn., to Luverne and Pipestone, Minn., 10.5 cents.

Atchison, Topeka and Santa Fe

I. C. C. No. 6471, Aug. 12. Flour and grain products from Atchison, Kan., Kansas City, St. Joseph, Mo., and Leavenworth, Kan., (originating beyond) to Cincinnati, Ohio, 17 cents; Indianapolis, Ind., 16½ cents; (R) Jeffersonville, 17 cents; Lafayette, Ind., 16½ cents; (R) Louisville, Ky., 17 cents; Monon, Ind., 16½ cents; (R) New Albany, 17 cents; Oxford, 16½ cents (R), and Rensselaer, Ind., 16½ cents (R).

Illinois Central

I. C. C. No. A8388, Aug. 13. Grain and grain screenings from Peoria and Pekin, Ill., when from beyond to New Orleans, La., for export, 13½ cents.

Michigan Central

Supplement 12 to I. C. C. No. A133, Aug. 15. Grain and grain products from Oxford, Rochester and Rochester Junction, Mich., to Louisville, Ky., 13 cents (R).

Chicago, St. Paul, Minneapolis and Omaha

Supplement 3 to I. C. C. No. 3885, Aug. 17. Wheat (applies only on shipments which originated beyond and which are cleaned, milled, malted or otherwise treated in transit at La Crosse, Wis., for points east thereof via the Chicago & Northwestern Railroad) from St. Paul, Minneapolis and Minnesota Transfer, Minn., to La Crosse, Wis., 5.5 cents.

Supplement 9 to I. C. C. No. 3837, Sept. 1. Corn, rye, barley, cats and articles taking same rates, to Doon, Iowa, Luverne, Pipestone, Minn., Sioux Falls and Valley Springs, S. D., 14.5 cents; from Nebraska City, Neb., 13.75 cents.

Supplement 14 to I. C. C. No. 3567, Sept. 1. From St. Paul, Minneapolis, Minnesota Transfer, Minn., to Iowa, Iowa, grain products, 10 cents (applies only on products of shipments originating beyond); oil meal and oil cake, 10 cents.

Supplement 15 to I. C. C. No. 3782, Sept. 1. Between Blue Earth, Minn., and St. Paul, Minneapolis or Minnesota Transfer, Minn., flaxseed, 8.4 cents; wheat, 8.4 cents; coarse grain, 7.4 cents; between same point and Duluth, Minn., Superior, Superior (East End), Itasca, Ashland, Washburn or Bayfield, Wis., flaxseed, 13.4 cents; wheat, 13.4 cents, and coarse grain, 12.3 cents.

Wabash

I. C. C. No. 3257, Aug. 18. Flour (carloads) from Chicago, Ill., to Mt. Vernon, Ill., 12 cents; flour (less

(than carloads) in lots of 2,000 pounds or over, from and to above named points, 15.23 cents.

I. C. C. No. 3262, Aug. 21. Flour from St. Louis, Mo., and East St. Louis, Ill., to Green Bay, Wis., 18 cents; from Edwardsville, Ill., to Green Bay, Wis., 18 cents; from Glasgow, Mo., to Oskaloosa, Iowa, 15 cents. Wheat from Tracy, Hamilton, Harvey, Cordovia, Percy, Iowa, and other Iowa points to Minneapolis, Minnesota Transfer and St. Paul, Minn., 14 cents (R).

Chicago and Northwestern

Supplement 18 to I. C. C. No. 6697, Aug. 18. Mixed livestock feed and poultry feed between East St. Louis, Ill., St. Louis, Mo., or rate points and Chicago, Ill., or rate points, 8 cents; Milwaukee, Wis., or rate points, 10½ cents (R).

Supplement 18 to I. C. C. No. 7318, Aug. 25. Between Lake Mills, Iowa, and Minneapolis, Minnesota Transfer, St. Paul, Minn., flaxseed, 11.5 cents; wheat, 11 cents; and corn, oats, rye and barley, 10 cents; (R) between Lake Mills, Iowa, and Chicago, Ill., and Milwaukee, Wis., flaxseed, 18 cents; wheat, 15.5 cents, and corn, oats, rye and barley, 15 cents.

Chicago, Peoria and St. Louis

Supplement 6 to I. C. C. No. 732, Aug. 22. Grain and grain products from Peoria and Pekin, Ill., to Henderson, Ky., 9 cents (R).

Chicago, Milwaukee and St. Paul

Supplement 127 to I. C. C. No. A9945 R. R. No. Supplement 130 to G F D2463-D, Aug. 23. Between Pipestone, Minn., and Chicago, Ill., Milwaukee or Racine, Wis., flax and millet seed, 21 cents; wheat and flour, 18 cents; and corn, rye, oats and barley, 17.5 cents; between Minnesota Falls, Minn., and Chicago, Ill., Milwaukee or Racine, Wis., flax and millet seed, 18 cents; wheat and flour, 16 cents; corn, rye, oats and barley, 16 cents; flax and millet seed between Rapid City, S. D., and Chicago, Ill., Milwaukee or Racine, Wis., 45 cents; Duluth, Cloquet, Minn., or Superior, Wis., 45 cents; St. Paul, Minneapolis, or Minnesota Transfer, Minn., 40 cents.

I. C. C. No. B2748, Aug. 29. From Council Bluffs, Iowa, Omaha and South Omaha, Neb., (R) Kansas City, St. Joseph, Mo., Atchison and Leavenworth, Kan., to Newport News and Norfolk, Va. (for export) "Avena," rolled wheat, rye flour and rye skimmings, wheat flour, pearl barley, pearl wheat, etc., 22 cents; all grain food, oat food, corn food, hominy feed, oat meal, ground oats, rolled oats, corn meal, barley feed, bran, middlings, ship stuff, etc., 21 cents.

Kansas City Southern

I. C. C. No. 3234, Aug. 25. From Kansas City, Mo.-Kan., to Memphis, Tenn., wheat, 18 cents; corn, 17 cents; proportionals to Memphis, Tenn., from Kansas City, Mo., wheat, 14 cents, and corn, 13 cents; from St. Joseph, Mo., wheat, 17 cents, and corn, 16 cents.

Missouri Pacific

Supplement 4 to I. C. C. No. A2311, Aug. 26. From Coffeyville, Kan., to Muskogee, Okla., wheat and articles taking same rates, 14.5 cents; corn and articles taking same rates, 12.5 cents (R).

I. C. C. No. A2384, Sept. 1. To Texarkana, Ark., from St. Louis, Mo., East St. Louis and Du Po, Ill., hemp seed, Hungarian seed, 22 cents; flax and millet seed, 19 cents; from Thebes and Cairo, Ill., hemp seed and Hungarian seed, 20 cents; flax and millet seed, 17 cents.

Supplement 6 to I. C. C. No. A1546, Sept. 1. To Searcy, Ark., from Kansas City, St. Joseph, Mo., Atchison, Leavenworth and Elwood, Kan., wheat, 18 cents; corn, 15 cents; flaxseed, 18 cents; broom corn, 42 cents; hay and straw, 18 cents; from Omaha, South Omaha, Nebraska City, Neb., Council Bluffs, Iowa, wheat, 21 cents; corn, 18 cents (R).

Chicago and Eastern Illinois

Supplement 27 to I. C. C. No. 2500, Aug. 31. Wheat, corn, rye, oats, barley and buckwheat from Beecher, Dawson Park, Momence, Woodland, Pittwood, Hoopeston, Ill., and other Illinois points to Sheldon, Ill., 7½ cents (R).

Chicago Great Western

Supplement 4 to I. C. C. No. 4889, R. R. 92-A, Sept. 1. Between Minneapolis, Minnesota Transfer, St. Paul and South St. Paul, Minn., and Horton, Minn., Laird, Dover, St. Charles, Utica, Bethany, Altura, Bear Creek, Rollingstone, Minnesota City, Minn., flax and millet seed, 13 cents; wheat, 12.5 cents; corn, oats, rye and barley, 10 cents; between Winona, Minn., and Horton, Laird, Minn., flax and millet seed, 5.7 cents; wheat, 5.7 cents; wheat, 5.7 cents; corn, oats, rye and barley, 5 cents; and numerous other rates between Minnesota points.

Grand Trunk

I. C. C. No. 1928, Sept. 1. Ex-lake grain from Collingwood, Depot Harbor, Goderich, Kingston, Midland, Port Colborne, Sarnia and Tiffin, Ont., and Port Huron, Mich., to Boston, Mass., (destined British and foreign countries, except Newfoundland and St. Pierre Miquelon), wheat, 5.5 cents; flax, 5.5 cents; rye, 5.25 cents; corn, 4.75 cents; barley, 4.75 cents, and oats, 3.70 cents per bushel.

I. C. C. No. 1929, Sept. 1. Ex-lake grain from Collingwood, Depot Harbor, Goderich, Kingston, Midland, Port Colborne, Sarnia and Tiffin, Ont., and

Port Huron, Mich., to Portland, Maine (consigned through to British and foreign countries, except Newfoundland and St. Pierre Miquelon), wheat, flax, 5 cents; rye, 4.75 cents; corn, 4.25 cents; barley, 4.25 cents, and oats, 3.45 cents per bushel.

I. C. C. No. A1529, Sept. 1. Flaxseed from Milwaukee, Wis., to Cleveland, 11½ cents, and Toledo, Ohio, 9½ cents; from Chicago, Ill., to Detroit, Mich., 7½ cents; Cleveland, Ohio, 9½ cents; South Bend, Ind., 4½ cents; Toledo, Ohio, 7½ cents, and West Detroit, Mich., 7½ cents (R).

Missouri, Kansas and Texas

Supplement 7 to I. C. C. No. A3742, Aug. 20. Between Chercreek, Rex, Falls City, Arkansas River, Shops, Lowerre, Okla., and St. Louis, Hannibal, Mo., East St. Louis, Alton and East Hannibal, Ill., corn, linseed meal, 18 cents; wheat, 20 cents; flaxseed and millet seed, 23 cents, and hemp seed, 26 cents.

I. C. C. No. A3874, Aug. 20. From Kansas City, Mo., to Russell Creek, Welch, Blue Jacket, Jonestown, Kelso, Vinita, Hulwe, Big Cabin, Patton, Adair, Dawes, Pryor, Rogers, Chouteau, Mazie, Leliatteta, Wagoner, Gibson and Verdard, Okla., wheat and

articles taking same rates, 10 cents; corn and articles taking same rates, 9 cents, and numerous other rates applying to Oklahoma points.

I. C. C. No. A3872, Sept. 1. From Gas and Iola, Kan., to Fort Smith, Ark., corn, 16 cents; wheat, 19 cents; linseed meal, 16 cents; millet seed, 21 cents; hemp seed, 24 cents; flaxseed, 21 cents; to Little Rock, Ark., corn, 17½ cents; wheat, 20½ cents; linseed meal, 17½ cents; millet seed, 23 cents; flaxseed, 23 cents; hemp seed, 26 cents; to Memphis, Tenn., corn, 17 cents; wheat, 18½ cents.

F. A. Leland, Agent

I. C. C. No. 1001, Sept. 7. Rice bran from Carlisle, DeWitt, Hickory Ridge, Lonoke, Stuttgart, Weiner, Wheatley, Ark., to Springfield, Mo., 14½ cents; rice bran from Orange, Beaumont, Doebrown, East Beaumont, Nederland, Port Arthur and West Port Arthur, Texas, to Springfield, Mo., 20 cents; this tariff contains numerous rates applying on rice and rice products, viz.: Bran, flour, hulls, polish and straw, from various stations in Arkansas, Louisiana and Texas, to northern, eastern, southern, western and Canadian points.

FIELD SEEDS

The Angus MacKay Seed Company is building a warehouse at Indian Head, Sask.

The International Linseed Company has been incorporated at Moose Jaw, Sask.

A seed house is being erected in connection with the Farmers' Elevator at Fairview, Ill.

J. M. Kirkpatrick has purchased the seed and feed store of Albert Plummer at Eaton, Ohio.

T. E. Bridges has purchased one-half interest in the seed store at Ocala, Fla., owned by W. D. Carn.

E. F. Spears & Sons, of Paris, Ky., will rebuild the grass-seed cleaning plant recently burned with a loss of \$50,900.

The Mooney Seed Company, Ltd., of Regina, Sask., has been authorized to increase its capital stock from \$100,000 to \$200,000.

The Lake Shore Seed Company will build a fire-proof building at Dunkirk, N. Y., to replace the building destroyed by fire last month.

The Northfield Seed and Nursery Company has purchased a site at Northfield, Minn., on which it will build an office and a modern drying house.

Prof. W. L. Oswald, of the seed laboratory work in connection with the Minnesota State University Farm, gave a week's course of free instruction in seed testing to the farmers, seed men, nurserymen, etc., of that state, last month.

The Door County Seed Company, which has been engaged in business at Sturgeon Bay, Wis., for several years, has purchased a strip of land, 40x150 feet in size, and will soon erect a building on the site for its seed and feed business.

Dwight and De Mange Funk, of Bloomington, Ill., have purchased an extensive acreage of land in St. Charles Parish, Louisiana, 10 miles from New Orleans, which will be developed by reclamation for the establishment of a large seed farm. It is reported that more than \$1,000,000 will be invested in the entire proposition.

A new company incorporated as the Courteen Seed Company at Milwaukee, Wis., recently took over the wholesale seed business which S. G. Courteen has conducted for 21 years. Mr. Courteen is president of the company, F. W. Kellogg, vice-president, and F. K. Moran is secretary-treasurer. The management will continue the same as in the past. The company lately moved into its recently completed plant.

It is reported that the Michigan Board of Agriculture will make a determined effort to prohibit the sale of adulterated seeds in the state. At a meeting of the Board held in Detroit, on July 16, the matter was discussed and Dr. Ernest Bessy, professor of botany in the Michigan Agricultural College, was authorized to issue a circular setting forth the new state seed law and its requirements. The law becomes effective August 15.

The Board of Regents of the Minnesota University has considered plans for the erection of a seed warehouse in connection with the agricultural experiment station at Crookston, Minn. The house will cost \$5,000 and will be the distributing center for northwestern Minnesota. It will be the first of a series of warehouses to be built in Minnesota as a part of its agricultural equipment. A similar house will be erected at Morris for the west central counties, also at Duluth and Grand Rapids for the north central section and the present storehouse at

the University farm will be enlarged to supply southern Minnesota.

The Tessum Seed, Grain and Supply Company has been organized at Thief River Falls, Minn., to succeed the Tessum-Temanson Elevator Company, and is composed of O. Tessum, M. Anderson and T. Reep. Mr. Anderson will have charge of the elevator.

Governor McGovern of Wisconsin has signed a pure seed bill regulating the sale of seeds. The bill was drawn by Professor R. A. Moore of the Wisconsin Agricultural College and requires the exact labeling of the purity of seeds on each container. Inspectors of the Agricultural Department are required to collect samples of seeds in the open market and to prosecute in the name of the state those against whom evidence of fraud is secured.

"What will the seed crop be?" asks C. A. King & Co. of Toledo. "Majority still hope for large crop. Will they be disappointed? August will tell the tale and probably cause a more decided fluctuation in the price. Medium constitutes most of the crop. Ohio and Indiana formerly raised more red clover than all the other states combined. They have had hard luck since 1908, when they raised 1,900,000 bushels. In 1911 they had only 300,000 bushels. They had 1,850,000 in 1897. Michigan and Wisconsin are large producers. Michigan led in 1911 with 215,000 bushels. Wisconsin averages more than Michigan. They had 450,000 bushels in 1909. Some of the smaller states are increasing their output. Northwest and far West are becoming more important producers. Illinois and Missouri both export some and import some into other sections. New York and Pennsylvania are the largest consumers. Smaller seaboard states had some last year. Canada harvests late. European crop helps to make the price. It almost decides it in some seasons. Let us know how crop matures in your section?"

PURE SEED BILL INTRODUCED

Senator Gronna has introduced a pure seed bill in the Senate urging the regulation of interstate shipments of seeds. This is similar to the present law prohibiting the importation of impure seeds. The restrictive features of the Gronna bill read as follows:

"Section 2. That seed shall be considered adulterated within the meaning of this act:

"First—When seed of red clover contains more than three per cent by weight of seed of yellow trefoil or any other seed of similar appearance to and of lower market value than seed of red clover.

"Second—When seed of alfalfa contains more than three per cent by weight of yellow trefoil, burr clover and sweet clover, singly or combined.

"Third—When any kind of variety of the seeds, or any mixture described in section one of this act, contains more than five per cent by weight of seed of another kind or variety of lower market value and of similar appearance: Provided, that the mixture of the seed of white and alsike clover, red and alsike clover, or alsike clover and timothy shall not be deemed an adulteration under this section.

"Section 3. That seed shall be considered unfit for seeding purposes within the meaning of this act:

"First—When any kind or variety of clover or alfalfa seed contains more than one seed of dodder to five grams of clover or alfalfa seed, respectively.

"Second—When any kind or variety of the seeds

or any mixture described in section one of this act contains more than three per centum by weight of seeds of weeds.

"Third—When the germination of any of the seeds or mixtures described in section one of this act is less than 90 per cent."

HAIRY VETCH ADULTERATION

During 1912, the United States Department of Agriculture secured 391 samples of seeds of the hairy vetch in the open market in accordance with the act of Congress covering seed adulteration and misbranding, and they were examined under the direction of E. Brown, botanist in charge of the Seed Laboratory. Of this number, 207 were found to be either adulterated or misbranded. Hairy vetch seed was collected for the second time in 1912, when 53 per cent of the samples were found to be adulterated or misbranded, as compared with 62 per cent in the year 1911. Of these samples, 17 contained no seed of hairy vetch, but were composed of cultivated forms of spring vetch, while 190 samples consisted of mixtures of hairy vetch, spring vetch, and other vetches.

The Department quotes the following definite way of discriminating between the seed of most other vetches and hairy vetch: "The difference in color of the interior of the seed shown by different kinds of vetches affords a ready means for detecting the use of vetch seed as an adulterant of hairy vetch. Crushed hairy vetch seed is of a

lemon-yellow color, somewhat lighter on the flat than on the rounded surface. The crushed seed of most of the other vetches occurring with the seed of the hairy vetch varies in color from a dark fawn to reddish orange. Crush a small handful of seed and if there are any fawn, salmon, or reddish orange colored pieces the seed is not pure hairy vetch."

GERMAN IMPORTATION OF KENTUCKY BLUE-GRASS SEED

European buyers import Kentucky blue grass seed in bags containing about 100 pounds, and these are usually shipped via New York on through bills-of-lading in carload lots of at least 30,000 pounds. It is claimed that smaller quantities are impracticable for shipment owing to existing freight rates. The buyers order by means of samples which are thoroughly tested as to purity and fertility.

According to Consul General A. M. Thackara, of Berlin, Germany imported 2,078 metric tons of clover, rye grass, timothy and canary seeds in 1911 and 3,186 metric tons in 1912. He also states that the prices of Kentucky blue-grass seed have shown a marked decrease during the past year as a result of the recent large harvest. The following are the average German prices of this seed per 100 English pounds for the past years c. i. f. Hamburg: Autumn of 1912, \$22.10 to \$22.50; autumn of 1911, \$21.50 to \$22.50; autumn of 1912, \$8 to \$12.

There were about 800 bushels of old wheat and 320 bushels of new wheat in the elevators.

The Occident Elevator at Berea, N. D., was completely destroyed by fire of unknown origin last month. The elevator was comparatively new and contained considerable grain.

The elevator and warehouse of the A. & J. Grand Company at Escanaba, Mich., was gutted by fire on July 13, together with several tons of hay and a quantity of grain. The loss was about \$3,000, with insurance \$1,000.

The mill and elevator of the Eikenberry Grain Company at Chariton, Iowa, was completely destroyed by fire recently. The loss was \$10,000, with insurance amounting to about \$5,700. W. A. Eikenberry, the owner, will rebuild.

The hay, grain and feed store of Albert Rothschild, 2817 South State Street, Chicago, was damaged by fire on Aug. 1. The flames are believed to have been caused by spontaneous combustion in the rear of the building where baled hay was stored.

The grain cleaning house of the Hubbard Milling Company at Mankato, Minn., was gutted by fire on July 10, causing a loss of \$15,000, covered by insurance. The fire is believed to have originated from a hot journal. The building will be reconstructed.

The corn elevator of the Alliance Milling Company, Denton, Texas, was burned last month, causing a loss of over \$4,000. There was \$2,000 insurance on the building. There was about 2,500 bushels of corn in the elevator and this was partially saved.

Fire destroyed the Farmers' Elevator at Flasher, N. D., on July 15, together with a quantity of grain. The loss on the house amounted to \$18,000, partially covered by insurance. There was no insurance on the grain. The fire started from a lantern explosion.

The elevator at McVie, N. D., owned by John E. Cary, was destroyed by fire recently. The house contained several thousand bushels of grain. The Gruber Elevator also became ignited but escaped destruction. Mr. Cary's elevator and contents were covered by insurance.

The elevator of the O'Neil-Kauffman-Petit Grain Company at Hutchinson, Kan., was struck by lightning on July 18 and burned. The house was empty awaiting the new crop. The loss was \$27,000, with insurance amounting to \$20,000. The elevator had a capacity of 55,000 bushels.

Grain in the plant of the Dwight-Hanlon Company at Pittsburgh, Pa., was damaged by fire to the extent of \$5,000 last month. The fire started in a grain shaft which runs from the basement to the fourth floor and the firemen had to remove tons of grain to locate the trouble.

Fire originating from engine sparks destroyed the Farmers' Elevator at Gilman, Iowa, in July, together with a quantity of oats and wheat. The loss was \$5,600, with \$3,000 insurance on the building. The house formerly belonged to Wilson & Jacobson but was purchased by the Farmers' Elevator Company about a year ago for \$5,000.

The Johnson Feed Store at Pekin, Ill., was practically destroyed by fire on July 30, said to have been caused by spontaneous combustion. The front of the building was wrecked, the interior badly charred and the stock of hay and straw ruined. An adjoining room, filled with grain, stock foods, etc., was badly damaged by fire and water.

On Aug. 7 the elevator at Armstrong, Minn., owned by T. E. Flaskerud, was ignited by sparks from a passing locomotive, and within two hours the elevator and adjoining coal sheds were in ruins. The house was leased by Will Carlson, who lost 105 tons of coal and a small quantity of grain. The elevator was valued at \$4,000, partly covered by insurance.

Locomotive sparks are said to have started a fire which destroyed the elevator at Clayton, Iowa, owned by the Chicago, Milwaukee & St. Paul Railroad, on July 14. The fire spread to other buildings in the village but the work of bucket brigades finally extinguished the flames. The total loss amounted to \$10,000, largely covered by insurance.

For the second time in less than a year, fire destroyed a large part of the plant of the Nickel Plate Elevator & Coal Company at Cleveland, Ohio, on July 30. It is believed that the fire originated from locomotive sparks. The feed mill, mixing plant and elevator were destroyed. George Schmitt, president of the company, stated the loss to be approximately \$50,000.

M. F. Sanders and C. H. Carmack were crushed to death beneath several tons of machinery in the metal elevator of the Bewley Mills, Fort Worth, Texas, on July 23, while engaged with a crew of laborers who were wrecking the elevator tank, which was practically destroyed by fire several weeks ago. According to William P. Bomar, secretary of the Bewley Mills, the accident is thought to have been caused by the breaking of partially burned timber supports that held the machinery.

FIRES—CASUALTIES

A severe storm wrecked the Farmers' Elevator at Walnut Grove, Minn., recently.

The Trans-Mississippi Elevator at Boone, Iowa, was destroyed by fire last month.

Lightning slightly damaged the elevator of Wm. Wheeler at Melvin, Ill., on July 29.

A grain elevator at Indianapolis, Ind., was damaged by a wrecked train on July 31.

The Occident Elevator at Wilton, N. D., was badly damaged in a wind storm on July 20.

The elevator of C. S. Evans at Nicholasville, Ky., was slightly damaged by fire on July 13.

The elevator of W. W. Pearson at Upland, Ind., was slightly damaged by fire on Aug. 5.

The floating grain elevator *Excelsior* was damaged by fire recently, in New York harbor.

The elevator of the Ravenna Mills, Ravenna, Neb., was somewhat damaged by fire recently.

J. S. Emerson's elevator at Mapleton, Minn., was somewhat damaged by a wind storm on July 31.

K. S. Meyer's elevator at Milford, Iowa, burned last month, together with 12,000 bushels of grain.

The house of the Cargill Elevator Company at Hufiton, N. D., was damaged by lightning last month.

The elevator of the Equity Elevator Company, Abercrombie, N. D., was totally destroyed by fire Aug. 7.

The elevator of the Haynes-Shoffner Grain Company at Little Rock, Ark., was recently destroyed by fire.

One side of the Besemer Elevator at Kackley, Kan., gave way last month and considerable grain poured out.

Fire, supposed to have originated from lightning, burned the Monarch Elevator and contents, at Oberon, N. D.

The Quick Elevator at Lindenwood, Ill., was struck by lightning recently and burned, entailing a loss of \$5,000.

The elevator of C. H. Barlow at Kokomo, Ind., was completely destroyed by fire recently, the loss amounting to \$10,000.

The Birmingham Grain Company's building at Birmingham, Ala., was damaged to the extent of \$15,000 by a recent fire.

Fire seriously damaged the stock of feedstuff in the elevator of the Carter Grain Company, Bay City, Texas, on July 21.

A bin in the Farmers' Elevator at Green Valley, Ill., burst on July 15, letting about 3,000 bushels of wheat out on the ground.

The Farmers' Elevator at Strausville, Neb., was destroyed by fire recently, the loss amounting to \$5,000, with insurance \$4,000.

John Gunn, grain dealer at Loraine, Ill., was painfully injured in his elevator on July 18, when some boys stepped into the house and threw the trip, but were unable to stop it before it came down

and struck Mr. Gunn on the face, inflicting serious cuts.

The elevator of the Omaha Elevator Company at Fremont, Neb., was destroyed by fire on July 20. The house had not been in use.

Fire damaged the plant of the Gafford Lumber and Grain Company, Oak Hill, Kan., recently, to the extent of several hundred dollars.

Fire originating in a pile of corn caused a small loss in the plant of the Texas Grain and Elevator Company, at Fort Worth, Texas.

The Erie Elevator at Rochester, Ind., was blown down during a severe wind storm recently, resulting in damage amounting to \$1,000.

The mill and elevator plant of the Ziliak & Schafer Milling Company at Haubstadt, Ind., was completely destroyed by fire on Aug. 8.

The large elevator of the Meaford Elevator Company at Meaford, Ont., together with 100,000 bushels of grain, was destroyed by fire recently.

The Royal Elevator at Herbert, Sask., was completely destroyed by fire, the loss amounting to about \$5,000, partially covered by insurance.

The elevator at Vermillion, Minn., owned by Gergen & Wagner, containing a large quantity of grain, was struck by lightning and burned recently.

The elevator and feed store of John Mueller at Lockland, Ohio, were destroyed by fire on Aug. 2. Further details are given elsewhere in this issue.

Fire, believed to have been of incendiary origin, destroyed the Canadian Northern Elevator at Brandon, Man., on July 16. The loss was about \$4,000.

The Bluhm Elevator at Holden, Mo., operated by the Holden Milling Company, has been destroyed by fire. The house was constructed thirty-five years ago.

The alfalfa mill, situated about three miles from Yukon, Okla., was destroyed by fire recently. The property was owned by Ed Dunn of Oklahoma City, Okla.

Jacob Lambert, aged 18 years, while working on the Pierce Elevator at Union City, Ohio, fell from a scaffold a distance of 50 feet and was seriously injured.

Fire on July 11 destroyed the warehouse of the A. B. Crouch Grain Company at Temple, Texas, the loss amounting to about \$5,000, partially covered by insurance.

Fire swept through the warehouse of the Harsh Bros. Grain Company, at Nashville, Tenn., on July 26, damaging a stock of grain valued approximately at \$75,000.

C. H. Anderson's elevator at Seymour, Ind., was damaged by fire, on July 31, to the extent of \$3,000, partially covered by insurance. The fire was caused by a hot journal.

The two elevators at Jenkins' Switch, near Clinton, Ill., were totally destroyed by fire on July 24, the blaze having started from engine sparks. The damage amounted to nearly \$5,000, with \$3,500 in-

BARLEY AND MALT

The West Bend Malting Company of West Bend, Wis., is building three new concrete storage tanks.

The plant of the former D. Rothschild Grain Company at East Side, Chicago, which has been operated as the National Malting Company, was sold at public sale recently.

The 1913 barley crop of the Pacific Northwest has been estimated at 12,000,000 bushels. The crop is a little later than usual, but otherwise no fault has been found with it. There is, perhaps, a slight decrease in acreage owing to the increase in wheat acreage.

The Plymouth Brewing and Malting Company has been incorporated at Plymouth, Wis., with a capital stock of \$200,000, \$150,000 of which is common stock and \$50,000 preferred stock. The new company has taken over the stock of the Plymouth Brewing Company. The officers are as follows: President, J. E. Curtis; vice-president, H. J. Goelzer; secretary and treasurer, C. A. Lamm.

It is stated that in a recent exhibition of barley on the floor of the Grain Trade Association of the Chamber of Commerce, San Francisco, Cal., specimens of the California product compared very favorably with 56 varieties gathered from a number of countries. The California barley was grown on the experimental farm of the E. Clement Horst Company at Wheatland, in the Sacramento Valley. The company deals extensively in brewing barley and has been making an effort to introduce new species of the grain. Pedigreed seed was secured from the East and from foreign countries and experiments were made on land not irrigated nor fertilized. The yields varied from 40 to nearly 70 bushels per acre.

P. C. Kamm & Co., of Milwaukee, Wis., in their rye report of Aug. 13, say: "During the past month the rye market continued active and firm with the No. 1 grade selling at 64 to 64½ cents per bushel. f. o. b. Milwaukee and No. 2 63 to 63½ at the present time. The new crop has been cut and some thrashing has been done although the great bulk of the rye is still in shock in the fields. The rye in Wisconsin will show a large yield and under favorable weather conditions, while in shock, will be of an exceptionally good quality. The government crop report of August 8 places the estimated rye yield of the United States at 35,000,000 bushels on 2,134,000 acres being a yield of 16.3 bushels per acre. The quality is placed at 94 per cent being 2 per cent above the ten-year average. Last season the quality at this time was represented as 91.5 per cent but it must be remembered that immediately thereafter continued rains damaged the rye in shock to a great extent so that the final quality percentage was reduced considerably. While no official Wisconsin state report is at hand at this time covering the conditions in this state as they are at present, private reports to the various Milwaukee grain dealers and commission houses all indicate that Wisconsin will again be the leading rye state both as to quantity and quality. The first car of rye to reach Milwaukee was inspected July 29th and graded No. 1 tested 57 lbs. and was bought by us at 63½ cents per bushel. There have been scattered receipts of new rye since then and such shipments as have been received bear out the reports as to quality testing from 57 to 58 pounds to the bushel, of good color and sound berry."

THE BARLEY AND MALT SITUATION

The world's barley crop is only fair and in Canada the same conditions prevail as in this country, says W. H. Prinz, in the *American Brewers' Review*. The late rains, however, will do more good in Canada, because their season is late. Taking it all in all, this country and Canada will have a crop of reduced acreage and very much reduced yield, and much thin and flat barley, and higher prices.

There seems to be quite an export demand for barley of the feed type and last week 200,000 bushels were exported.

The after seeding rush of barley did not amount to much and was soon over. The receipts of late have fallen off to next to nothing, and the quality is getting poorer every day, but the barley is needed and will be malted, and we shall start the new season without much to carry over, and maltsters will do well to get all the old barley they can get, providing the quality is all right to start up with. Most malt houses will not shut down, but should not use new barley for at least two months to come. What is certain is that all cereals, with the exception of corn, will be much higher in price than last season, and the corn crop is by no means secure yet.

The demand for malt has been very good, and some new contracts were made for future delivery

at advanced prices. In general, however, the hand to mouth policy prevails. There is also some talk about closing contracts covering next season's delivery.

GOOD MALTING BARLEY

In a recent issue of the *Canadian Miller and Cerealist* the malting qualities of barley were discussed and the "Chevalier" was named as a particularly good variety for the use of the maltster. Either the four-rowed or two-rowed barley has a better chance of development than the six-rowed variety, while the best grain is produced on light, warm soils or on rich, loamy, well-drained soils.

Barley of strong vitality is very desirable as a small percentage of "dead" grains will spoil the quality of the malt. They would represent a certain percentage of barley in the malt and provide a breeding ground for molds during germination. According to Slopes, a good grain of barley divided along the furrow and examined under a microscope should have a "juicy, fairly firm, yellow appearance very closely resembling, in consistency and color, good, firm, freshly-churned grass butter, or have a greenish-yellow color, very like wax." If the divided grain has a grey appearance, its vitality is low, and if reddish-brown, dark or dried and shriveled, it is dead.

A tendency to irregular growth is a detriment as this would produce an uneven growth on the floor during the malting process. As a rule barley should be used before it is two seasons old, as its vitality is affected by age. It has been found that the quality improves for several months after harvest and then slowly declines. Damp barley and under-ripe or over-ripe grain should be avoided. As uniform grains are necessary in the malting process, the difficulty of irregularity of growth is overcome by grading.

Good barley is of a light, straw-yellow color. If greenish in color it hints at immaturity, and if too pale it points to over-ripening. Dark or black tips indicate heating in the stack or that the grain is too old. The skin should be thin, smooth and slightly wrinkled. Thick heavy, crinkled skins indicate that it has been grown on wet land.

CHICAGO BARLEY MARKET

BY A. L. SOMERS
President, Somers, Jones & Co.

Barley values have gained 6 to 8 per cent per bushel during the past ten days. Today, Wednesday, August 13, as high as 70 cents is obtainable for really choice quality, with sales of malting qualities mainly at 63 to 66 cents. Feed barley is 50 to 55 cents, old or new. The arrivals are mostly new barley, very little old now coming, but the trade is ready to take either kind if kept strictly separate and if of reasonably good malting quality.

The wet weather in the barley territory, mainly in Minnesota, is delaying thrashing operations and consequently also the movement of new barley to market. It is the cause of the strong undertone in values, as the trade is ready to take hold freely.

We still feel that good to choice malting qualities will sell at from 70 to 75 cents before the first of October and that that range of values will be well maintained for the first half of the season at least. Values for later in the season will depend very much on other grain values and on final crop results.

From the many samples now coming in from all parts of the barley territory, we are inclined to think that the barley crop is turning out somewhat better than at first expected. We get samples of large berried, rather heavy weight but somewhat stained barley from the greater part of the territory and reports of yields are all the way from 30 to 40 bushels. As there are fair reserves of barley and malt in farmers' and in consumers' hands, it is a question whether an advance to much over 75 cents will be scored at any time throughout the season.

California has a large carry-over of barley and waiting for a chance to sell it in the Middle States and seaboard markets. They have not sold as much as usual to the continent this year and have liberal quantities to sell. The Northwest, the Oregon and adjacent territory, has large crops of barley which may also enter into competition when prices get high enough.

Altogether we feel inclined to advise country shippers to dispose of their barley holdings as freely as possible between now and January 1. It is a question whether late extreme values in any grain will be maintained. There is too much bull sentiment and too much holding propensity among farmers. It will probably result in heavy offerings later in the season.

CROP REPORTS

THE GOVERNMENT ESTIMATE

August 8, 1913, 2:15 p. m.

The Crop Reporting Board of the Bureau of Statistics of the United States Department of Agriculture estimates, from the reports of the correspondents and agents of the bureau, as follows:

For the United States:

Crops.	Cond'n, Aug. 1,		10-yr. av.		—Acreage, 1913—	
	1913.	1912.	av.	of 1912.	Pct.	Acres.
Corn	75.8	80.0	82.2	99.8	106,884,000	
Winter wheat .....	...	...	...	116.4	30,938,000	
Spring wheat	74.1	50.4	80.4	97.0	18,663,000	
All wheat .....	...	...	...	108.3	49,601,000	
Oats	73.7	90.3	81.5	101.1	38,341,000	
Barley	74.9	89.1	83.0	96.3	7,251,000	
Rye .....	...	...	...	100.8	2,131,000	
Buckwheat	85.5	88.4	89.9	100.0	1,111,000	
Flax	77.4	87.5	82.9	85.1	2,427,000	
Rice	88.7	86.3	88.8	114.0	18,824,100	
Hay, all tame	81.8	91.0	84.3	97.5	18,993,100	

a Five-year average.

States.	Per cent of U. S. acreage in state.		OATS.			
	Aug. 1, 1913.	July 1, 1913.	Aug. 1, 1912.	10-yr. av.	Condition—	
Iowa	12.7	80	84	96	84	
Illinois	11.2	54	62	94	79	
Minnesota	7.8	83	80	92	83	
Wisconsin	6.0	90	91	88	85	
Nebraska	5.9	72	81	78	77	
No. Dakota	5.9	71	71	94	76	
Kansas	4.9	56	58	86	67	
Ohio	4.8	71	72	96	85	
Indiana	4.6	54	54	97	81	
So. Dakota	4.2	68	76	87	83	
Michigan	4.0	76	77	87	84	
New York	3.4	86	89	77	88	
Missouri	3.2	60	57	92	75	
Pennsylvania	3.0	84	83	87	89	
United Sts.	100.0	73.7	76.3	90.3	81.5	

WINTER WHEAT. 1913, Preliminary.

States.	Yield per acre.		Quality, pct.		1912	
	Production, bus. (000 omitted)	Yield per acre, bus.	Production, bus. (000 omitted)	Yield per acre, bus.	Quality, pct.	
Kansas	13.0	86,515	92	15.5	91,450	93
Nebraska	18.6	58,106	93	18.0	50,850	97
Missouri	17.1	39,586	96	12.5	23,750	88
Illinois	18.7	41,963	96	8.3	9,819	79
Indiana	18.5	39,534	97	8.0	10,080	77
Ohio	18.0	34,326	95	8.0	9,760	82
Oklahoma	10.0	16,380	83	12.8	20,096	84
Pennsylvania	17.0	21,862	90	18.0	22,320	92
Washington	27.0	28,998	97	27.6	27,269	94
Michigan	15.3	12,714	94	10.0	7,000	78
Virginia	13.6	10,064	93	11.6	8,596	88
Kentucky	13.6	9,765	96	10.0	6,860	82
Tennessee	12.0	8,208	96	10.5	7,077	86
Texas	17.5	11,812	89	15.0	11,025	88
Maryland	13.3	8,073	87	15.0	8,985	88
North Carolina	11.7	7,055	95	8.9	5,222	84
Oregon	21.4	11,599	97	26.8	16,884	87
Montana	25.6	13,261	95	24.5	11,638	95
New York	20.0	6,700	96	16.0	5,360	90
Iowa	23.4	7,816	96	23.0	6,900	96
Idaho	27.4	9,069	95	28.7	9,614	96
California	14.0	3,822	87	17.0	6,290	89
United States	16.5	510,519	93.7	15.1	399,919	90.7

SPRING WHEAT.

States.	Per cent of U. S. acreage in state.		Condition—			
	Aug. 1, 1913.	July 1, 1913.	Aug. 1, 1912.	10-yr. av.		
No. Dakota	40.7	68	70	94	77	
Minnesota	22.5	85	81	89	82	
So. Dakota	19.7	65	60	85	80	
Washington	6.5	87	93	87	81	
United Sts.	100.0	74.1	73.8	90.4	80.4	
CORN.						
Illinois	9.9	72	83	79	83	
Iowa	9.3	85	89	89	83	
Nebraska	7.1	67	91	79	81	
Kansas	6.9	30	81	73	76	
Missouri	6.9	70	85	81	80	
Texas	6.6	79	82	75	76	
Oklahoma	4.8	44	87	65	73	
Indiana	4.6	84	88	80	84	
Georgia	3.8	87	91	75	88	
Ohio	3.7	90	89	81	84	
Kentucky	3.4	72	90	83	86	
Tennessee	3.1	77	88	81	87	
Alabama	3.0	80	87	81	88	
Mississippi	3.0	85	85	79	84	
No. Carolina	2.6	87	89	86	86	
So. Dakota	2.5	92	93	83	85	
Arkansas	2.3	80	81	80	82	
Minnesota	2.2	95	96	83	82	
So. Carolina	1.9	86	86	79	84	
Virginia	1.8	88	91	85	86	
Louisiana	1.5	88	87	81	84	
Michigan	1.5	86	85	73	80	
Wisconsin	1.5	90	89	81	81	
Pennsylvania	1.4	87	87	80	86	
United Sts.	100.0	75.8	86.9	80.0	82.2	

A cablegram dated July 23, from the International Institute of Agriculture, Rome, Italy, which has been received by the United States Department of Agriculture, gives the following estimates for European Russia: Production of spring wheat, 511,101,000 bushels; all barley, 530,297,000 bushels; all oats, 1,029,623,000 bushels. The estimated production compared with last year is for all wheat, 26.5 per cent more; for all barley, 16.3 per cent more, and for all oats, 5.8 per cent more.

With harvest only two weeks distant the Saskatchewan Department of Agriculture estimates the total crop for the province as follows: Wheat, 125,557,014 bushels; oats, 121,435,630 bushels; barley, 10,137,897 bushels; flax, 13,539,918 bushels; total grain crop, 270,670,450 bushels.

North Dakota crops have shown a big improvement since the July 1 government report was issued, according to the North Dakota Development League. Heavy rains during the first two weeks of July have been followed by a splendid warm growing weather, and the crop is now nearly normal. Hot weather in June was responsible for a falling off in the condition of the grain at the time of the government report. The rye harvest is about completed.

Officials of the Texas & Pacific Railway recently reported: "A trip through the agricultural parts of Louisiana at the present time would convert the most confirmed pessimist into an optimist. The country is fairly groaning with splendid crops. This

in all grains. In 1912 the barley yield was 1,424,000 bushels, while this year it is estimated at 9,328,000 acres, a difference of over 4,000,000 acres. The oat crop is estimated to be the biggest this year, and is placed at 24,672,000 bushels, with an estimated acreage made by the Bureau of Statistics of the United States Department of Agriculture of 514,000 acres.

B. W. Snow, in his report of August 4, says that the corn crop is badly damaged by the prolonged drought. He draws an imaginary line through northern Illinois and Indiana, central Iowa, and along the Platte River in Nebraska. Everywhere south of that line—two-thirds of the corn belt—the crop is suffering and is lost in places. It is in such poor condition in the more fortunate spots that nothing but rain will save it from being a total loss. North of the line there are immense sections where the corn crop is suffering, though good yields will be obtained if there are heavy rainfalls. The bright

he said, "and are extremely so in the Fox River Valley. I never saw such crops in my life as in that section and in the eastern and northwestern parts of the state. In the extreme southern section they are looking a little thin, due in part to cold weather, but in general all crops are on a high level in this section. Most of the field crops are about one week behind. Corn is ten days behind. The hay crop is so enormous and the rains have been so frequent that the hay harvest will be two weeks later than usual. However, this means no injury to the crop. If the weather had been less variable and exceedingly hot all summer, the yield would have been smaller. The government crop report places Wisconsin's grain crop prospects for this year too high, especially with respect to wheat, although the wheat acreage is larger than last year's."

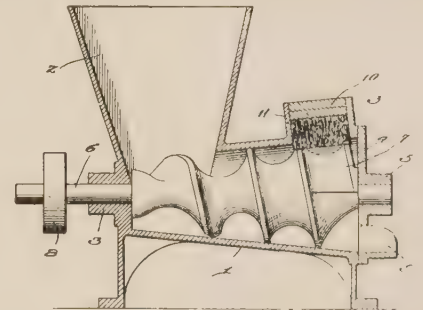
Secretary S. W. Strong, of the Illinois Grain Dealers' Association, sent out the following crop report on August 4, which was made up from estimates received from 345 stations in fifty Illinois counties north of the Vandalia Railroad, and including Lawrence, Wabash, and White counties: "The reports of wheat yields run from 12 bushels to 40 bushels, and an average yield of 21.91 bushels to the acre, on an acreage of 2,244,000 acres, would indicate a crop of 49,100,000 bushels. All reports, except nine, say the quality is from good to excellent. A yield of 21.02 bushels of oats to the acre as an average, and based on the acreage of 4,304,000 acres, would indicate a yield of 90,400,000 bushels. The reserves are estimated at 6.92 per cent, or 12,600,000 bushels. Present condition of corn is placed at 74.05 per cent, and the reserves yet to come forward are figured at 15.07 per cent, indicating 64,200,000 bushels of last year's crop in the hands of the producers. Twelve counties in central Illinois, the dry zone, put the condition of corn at 64.19 per cent. Counties outside of the dry section indicate a condition of 78.95 per cent. Many reports say, if rain does not come soon the damage to corn will be hard to estimate."

GRAIN TRADE PATENTS

Issued on July 15, 1913

Bean-Hulling Device.—Gustav J. Lange, Eau Claire, Wis. Filed March 9, 1912. No. 1,067,745. See cut.

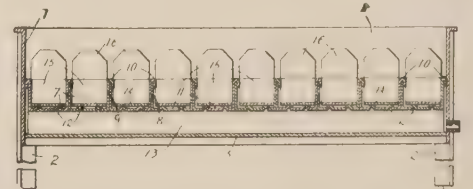
Claim.—A hulling device of the character described, comprising a cylindrical casing having an outlet opening in one end thereof and also provided with longitudinally extending slots in the sides and top thereof,



a hopper mounted in said casing adjacent the opposite end in which the outlet opening is formed, a tapered spiral screw extending longitudinally of the casing and rotatably mounted therein, longitudinal flanges formed on said housing adjacent the slots therein to form channel ways, rearwardly inclined transversely extending flanges connecting said longitudinal flanges to form end walls for said channel ways, longitudinally extending scraping brushes adjustably mounted in said channel ways in the casing, said cylindrical casing being tapered to substantially the same distance as the tapered screw, substantially as and for the purpose described.

Seed-Tester.—Ernest C. Schmidt and Alvin U. Smith, Bonesteel, S. D. Filed Nov. 9, 1912. No. 1,067,556. See cut.

Claim.—In a seed tester, the combination of a receptacle constructed of sheet metal and adapted to contain heated water; a tray comprising a plurality of metallic troughs each of said troughs having a side with a



straight edge and a side with a turned edge, the turned edge of one trough engaging the straight edge of the next adjacent trough; a pair of angle bars located beneath the several troughs of the tray and supporting the tray spaced from the bottom of the receptacle; and a plurality of seed holding cups located within each of said troughs, each of said cups consisting of a metallic piece having a short upturned side and a relatively higher upturned side forming a handle, substantially as described.

Bean-Sorting Machine.—Charles E. Smith, Saginaw, Mich. Filed Nov. 1, 1912. No. 1,067,447. See cut.

Claim.—In a sorting machine of the class described, the combination with a frame, of a hopper, feeding de-



From the "Columbus Dispatch."

SEPTEMBER CORN—IN OHIO, NOT KANSAS

year's corn crop in Louisiana is something marvelous. There is a good stand everywhere. Corn is well cultivated, and the ears are filled. Louisiana is going to make a record this year as a corn-growing state. The Texas crops are in excellent condition. However, it is reported that the recent hot winds have been detrimental to corn west of Fort Worth."

A crop letter issued by the Van Dusen-Harrington Company, Minneapolis, on August 7, says: "Dry weather has prevailed over North Dakota during the past week. The days have been hot, which has caused wheat, barley and oats to ripen too fast and some damage has been done to the late-sown grain. In the south and east portions harvest has started in wheat and barley and will be general next week. South Dakota and Minnesota barley and oats are practically all harvested and wheat is more than half cut. In the western section of the east half of South Dakota (or James River Valley and west) corn is turning fast and has deteriorated to some extent."

In his monthly crop bulletin, issued August 7, Secretary of State Martindale estimates that the yield of wheat in Michigan this year will be close to 12,000,000 bushels and that the grain is of fairly good quality. The average estimated yield per acre is 15.05 bushels. The average estimated yield of rye per acre is 13.62 bushels, while the yield of oats is estimated at 29.20 bushels per acre. The condition of corn is 87 in the state, 83 in the southern counties, 92 in the central counties, 90 in the northern counties, and 89 in the upper peninsula. The condition one year ago was 70 in the state and northern counties, 74 in the southern counties, 62 in the central counties, and 72 in the upper peninsula.

The estimated production of grain in Montana for 1913 is 54,000,000 bushels, according to preliminary figures prepared recently by J. J. Kennedy, Commissioner of Agriculture. The estimated acreage is nearly 1,000,000 acres. A comparison with the actual yield for the year 1912 is interesting, and shows that the production this year will exceed that of last by nearly 5,000,000 bushels. In 1912 something over 49,000,000 bushels of grain were harvested. With the exception of barley, the yield this year, as estimated, is greater than that of 1912

spots are the north half of Iowa, Nebraska north of the Platte River, South Dakota, and Minnesota. Those sections have had abundant rains and give promise of furnishing exceptional yields. July 1 there was a general prospect of a corn crop of 3,000,000,000 bushels as deduced from government reports.



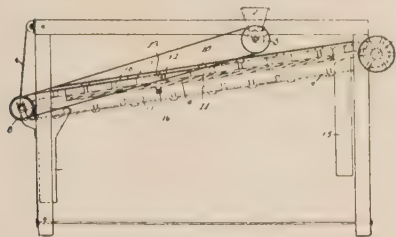
From the "Kansas City Journal."

SOMETHING TO SWAT IN KANSAS

The losses during July will reach 400,000,000 bushels and it is easily possible that, unless soaking rains come, the total crop will shrink to very low figures. Fortunately, there was a big crop last year and the carry over was large. Farmers, however, are refusing to let go of their corn at any price, saving it for their own uses.

The Wisconsin crop situation was never better, in the opinion of Prof. R. A. Moore of the State College of Agriculture, who has returned from a trip over the state. "Crops are generally good everywhere,"

vices, an inclined table, cross-bars located above said table and extending from side to side; means for traversing said cross-bars up said table; angularly disposed sets of scraping blades carried by certain of said bars; the blades of successive sets being oppositely



inclined, the rear ends of the blades of one set being staggered with reference to the front ends of the blades of the next succeeding set; and means for actuating said cross-bars.

Grain Door.—Edward Posson, Chicago, Ill. Filed Sept. 20, 1910. No. 1,067,548.

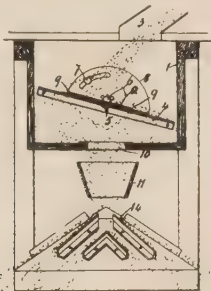
Grain-Purifying Apparatus and Process.—Earl H. Reynolds, Chicago, Ill. Filed Jan. 11, 1910. No. 1,068,342

Issued on July 22, 1913

Grain Door.—David Darwin, Iron River, Wis. Filed July 22, 1911; renewed Jan. 17, 1913. No. 1,068,327.

Appliance for Distributing Grain in Bins.—Thomas Pottinger, Edinburgh, Scotland, assignor to Thomas Robinson & Son, Ltd., a joint stock company of Great Britain. Filed May 14, 1912. No. 1,068,006 See cut.

Claim.—In appliances for distributing grain in bins the combination of a receptacle having an opening at the bottom, a plate adjustable angularly and longi-



tudinally in the receptacle, clamping devices for the plate, a hopper below the opening in the receptacle and adjustable vertically and laterally, and distributing devices at the upper part of the bin, substantially as set forth.

Means for Automatically Weighing Material on Conveyor-Belts.—Harry Comstock, Mineville, N. Y. Filed July 27, 1911; renewed May 31, 1913. No. 1,067,972.

Issued on July 29, 1913

Conveyor.—George W. Wilmot, Hazleton, Pa. Filed Sept. 27, 1912. No. 1,068,722.

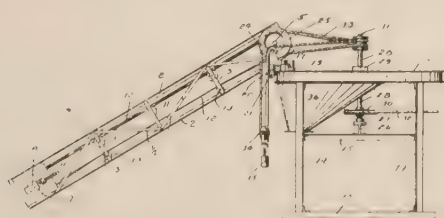
Portable Grain Elevator.—Milford H. Bull, Yorkton, Saskatchewan, Canada. Filed June 26, 1912. No. 1,068,978.

Issued on August 5, 1913

Grain Door for Box Cars.—Doty D. Chase, Freeville, N. Y. Filed Sept. 22, 1911. No. 1,069,111.

Conveyor.—Holger J. Nielsen and Charles J. Borglin, San Francisco, and Ludvig C. A. Soeborg, Alameda, Cal., assignors to Bear Milling and Mining Company, San Francisco, Cal., a corporation of California. Original application filed Nov. 25, 1911; divided and this application filed May 7, 1912. No. 1,069,163. See cut.

Claim.—In a conveyor structure, the combination with suitable framework, a horizontally disposed arc shaped track, a conveyor provided with movable conveying means, a carriage operatively connected to said con-

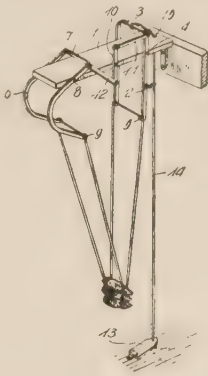


veyor at its delivery end, mounted upon said track, a driven pulley carried by said carriage for actuating the movable conveying means of said conveyor, an idler carried by said carriage, a driven pulley revoluble in a horizontal plane with its axis coinciding with the center from which the arc of said track is struck, a weighted idler, and an endless rope belt trained about said driving pulley, driven pulley, first mentioned idler and weighted idler, substantially as and for the purpose set forth.

Device for Stringing Seed-Corn.—Otto Armstrong, Ottumwa, Iowa. Filed Feb. 3, 1913. No. 1,069,595. See cut.

Claim.—A device for stringing corn comprising a horizontal bracket, a U-shaped member having straight arms pivoted to the edges of said bracket and provided with hooks at their lower ends, a second U-shaped member having curved arms pivoted near their upper ends to said bracket and having hooks at their lower ends, a rock lever pivoted to one edge of the bracket, a

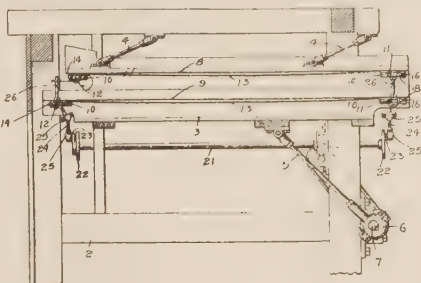
link connecting one end of this lever with one member and another link connecting the other end of this member with the other lever, a treadle, and a cord connecting the treadle with one of said members, the length of the latter being such that the member having



the straight arm swings past the hooks of the other member, for the purpose set forth.

Grain-Cleaning Machine.—James McDaniel, Minneapolis, Minn. Filed May 4, 1912. No. 1,069,453. See cut.

Claim.—The combination, with a screen and means for agitating the same, of means for whipping the screen to clear the meshes thereof, and means for mov-



ing said whipping means transversely with respect to the screen during the whipping operation, said whipping means being connected at both ends to said moving means.

Mechanism for Treating the Straw of Flax and the Like.—Bertrand S. Summers, Port Huron, Mich., assignor to Summers Linen Company, a corporation of Maine. Filed March 11, 1908. No. 1,069,202.

Drier Advertisement

Hot, dry winds in August will not take the place of grain driers from January to June, and elevator operators who are depending on the weather conditions, recently prevailing, to carry them through without loss from deterioration will be the losers.

There always has been and always will be, damp grain in the winter and grain which will lose grade because of moisture. The

HESS DRIER

insures you against losses, protecting your grain and holding its grade until shipment. If this was its only accomplishment it would be a good investment, but it has a big value, and returns good profits, by raising the grade of soft grain by drying.

Our model for 1913 will dry and cool any kind of grain or seed perfectly, at less expense than any other device in use. We will gladly supply printed matter and estimates on request.

The Hess Improved BROWN-DUVEL

Moisture Tester

is described in our tester booklet, which booklet also contains full instructions for the testing of all kinds of grain and seed.

Let us put your name on our mailing list and send you one. If you do not use a moisture tester you are buying water at the price of grain. More Hess Improved Testers are in use than all other kinds and makes combined.

Hess Warming & Ventilating Company

1210 Tacoma Bldg., Chicago

YOU are interested in Cincinnati —as—

it is the best cash market
in the country for Hay
and Grain, but you must

Consign

to get best results.

Our business is strictly
commission and we guar-
antee satisfactory service.

A copy of actual trans-
actions in the Cincinnati
market will be sent daily
upon request.

The Fitzgerald Bros. Co.

Members the Cincinnati Chamber of Commerce

CINCINNATI - - OHIO

OBITUARY

James Brown, a member of the Grain and Hay Exchange, Pittsburgh, Pa., passed away last month.

John Hughes, of the Hughes Grain Company, Hereford, Texas, was recently killed in an automobile accident.

William B. Kendall, a retired flour and grain merchant, died at his home in Paterson, N. J., on July 24, aged 68 years.

Jacob Deckard, flour and feed dealer at Middletown, Pa., passed away recently, aged 58 years. His wife will continue the business.

L. A. Manring, for over 20 years a prominent grain dealer in the Palouse district, died at his home in Colfax, Wash., last month.

Jacob Diehl, aged 58 years, passed away at Toledo, Ohio, on July 28. Mr. Diehl had been engaged in the flour and feed business for thirty years.

George Gibbs, formerly a grain dealer at Lake City, Minn., died at Minneapolis, on July 25, aged 75 years. Mr. Gibbs was actively engaged in business at Lake City in the early days, but had lived in Minneapolis since 1880.

P. B. Barlow, aged 74 years, died on his plantation near Shreveport, La., last month. Mr. Barlow had been engaged in the grain and stock business at Darlington, Wis., since 1860 until two years ago, when he purchased a plantation in Louisiana.

John S. Nason, aged 53 years, died at his home in Westboro, Mass., recently. Mr. Nason was a native of Kennebunk, Me., but he had been engaged in the grain and coal business at Westboro for the past 30 years. He is survived by a wife and six children.

S. B. Toye, aged 50 years, manager of the Tollmer-Clearwater Grain Company, Stites, Idaho, was found dead in the warehouse office on July 17, with two bullet wounds in his head. Little is known concerning his death but it is believed that he committed suicide. He is survived by three children.

Wesley Williams, aged 82 years, retired grain dealer, died at his home in Waynesburg, Ohio, on July 22. Mr. Williams was born near Mineral City, Ohio, and spent his entire life in that section. For many years he was engaged in the milling and grain business at that place. He is survived by his widow, three sons and four daughters.

R. B. Schneider, aged 61 years, a member of the grain firm of the Nye-Schneider-Fowler Company, Fremont, Neb., suddenly died of heart failure on July 26. Mr. Schneider had long been prominent in politics, having served as a member of the national executive committee of the Republican party in 1904. He is survived by his wife and three daughters.

George B. McCabe, formerly a grain and seed dealer at Toledo, Ohio, and at one time a member of the Toledo Produce Exchange, died at the Soldiers' Home at Sandusky, Ohio, on Aug. 6. Mr. McCabe was a dealer on the Toledo market thirty years ago and had been associated with various grain firms at that place until four years ago. After the death of his wife he retired from business activity and went to the Soldiers' Home.

Thomas J. Berry, traffic manager of the Elwood Grain Company, St. Joseph, Mo., died at the home of his brother in that city on July 13, following a long illness. Mr. Berry was born in Texas in 1863 but he had lived in Missouri since childhood. During his youth and early manhood he was connected with the railroad business, having served as agent at different points for the Rock Island and Great Western railroads. He is survived by three brothers.

Captain Amza Lewis Fitch, former member of the Chicago Board of Trade, died at his home in Oak Park, Ill., on July 13. Captain Fitch was born in Ohio 74 years ago, and went to New York, where at the outbreak of the Civil War he enlisted in the Thirtieth New York Artillery. He had been a resident of Oak Park for 40 years. He was a member of the firm of C. W. Elthike & Co., fire insurance agents, but retired 10 years ago. He leaves a wife and one daughter.

James Brown, aged 68 years, who had been engaged in the hay and feed business at Pittsburgh, Pa., for the past 46 years, died recently at his home in that city after an illness of two days. He was born in Ireland and came to America when 18 years of age. He entered the grain business two years later and was for a number of years manager of the Thomas McMichaels Company. In 1889 he started in business for himself and continued in the trade up to the time of his death, being proprietor of James Brown & Co. For many years he had been a member of the Pittsburgh Hay and

Grain Exchange. He is survived by one daughter and five sons.

George W. Thomas, former grain dealer, passed away on his plantation near Wortham, Miss., on August 1. Mr. Thomas was born in Illinois in 1864, and educated in Peoria, where he was connected with the T. A. Grier Grain Company for several years. Later he became a grain broker in New York City, where he resided for several years. About three years ago, he removed to Mississippi, where he conducted agricultural experiments on his plantation. He leaves a brother and two sisters.

William G. Hunter, aged 65 years, died at St. Vincent's Hospital in Indianapolis, Ind., last month. Mr. Hunter was born at Northville, Mich., and went to Indianapolis with his family in 1882. He was engaged in the flour and feed business at that place for many years, and afterward became associated with the Indianapolis Hominy Mills until 1898. Later he entered the grain brokerage business and was a member of the Indianapolis Board of Trade. He is survived by his widow and two children.

Isaac H. French, grain dealer, passed away at his home in Champaign, Ill., last month. Mr. French was born in New York 71 years ago, and was one of the early grain brokers of central Illinois. At one time he was engaged in the grain business at Gibson City, Ill., later going to Champaign. About five years ago he was forced to give up business activity owing to poor health, and his wife continued the business with his partner, L. Shulhafer, until two years ago. Mr. French was greatly interested in the work of the Methodist Church. He is survived by his wife, one daughter, two brothers and one sister.

For Sale

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

ELEVATORS AND MILLS

FOR SALE

Two elevators for sale; liberal terms. Write COON BROS., Rantoul, Ill.

ELEVATORS FOR SALE

Have a nice lot to select from at prices from \$3,000 up. Write and let me know how much you wish to pay. Am sure I can suit. JAMES M. MAGUIRE, Campus, Ill.

HOW TO SELL YOUR ELEVATOR

If you wish to sell your elevator promptly and quietly, write me, giving all the information. Must be worth the money. JAMES M. MAGUIRE, Campus, Ill.

FOR SALE OR RENT

Terminal elevator at Oklahoma City, Okla., with large storage capacity. Equipped with 100-ton track scale, 50-ton hopper scale, wagon and platform scales, corn sheller, clipper, cleaners and feed rolls. Motive power: 125-horsepower, one 20-horsepower, one 15-horsepower, one 7-horsepower electric motors. One 40-horsepower boiler to operate Hess Drier. This elevator is on private property with trackage on both sides, and has free switching to four trunk lines. This affords a splendid opportunity for a live grain firm to acquire and operate an elevator in a live and rapidly growing city, the gateway to the South. Would take good land in part payment. If interested, write J. C. PEARSON, Marshall, Okla.

ELEVATORS AND MILLS

FOR SALE

A 75-barrel roller flour mill, Nordyke & Marmon build, now in operation. Located in good wheat section of Virginia, with an available water power of 350 horse. P. P., Box 6, care "American Elevator and Grain Trade," Chicago, Ill.

MACHINERY

SECOND-HAND GASOLINE AND OIL ENGINES

Some bargains in gasoline and oil engines, rebuilt and good as new. CHARTER GAS ENGINE CO., Sterling, Ill.

WILL SELL CHEAP

One 35-horsepower gasoline engine, one double spindle shaper, good as new. FORD MANUFACTURING CO., Rockford, Ill.

GASOLINE ENGINES FOR SALE

Power users—Gasoline engine bargains from 1 to 100-horsepower. Get our big list and state your power requirements before you buy. BADGER MOTOR CO., Milwaukee, Wis.

FOR SALE CHEAP

One 35-horsepower Smith Gas Producer.
One 30-horsepower Fort Wayne Foundry & Machine Co., Horizontal Gas Engine.
Complete with muffler and gas expansion reservoir for attachment to artificial gas line, if desired. Operated about five years with perfect success. ECONOMY GLOVE COMPANY, Fort Wayne, Ind.

FOR SALE

Machinery and equipment complete of 1,500-barrel mill, Nordyke & Marmon Sifter System; is all nearly new, having been used only two years. Will sell all together, or any part of same. The equipment includes 150-horsepower Hamilton Corliss Engine and one 1,000-horsepower Reynolds Corliss Engine, vertical. HARTZ MACHINERY CO., 607 Arch St., Philadelphia, Pa.

MACHINERY BARGAINS

1 new No. 2 Marselles Sheller, capacity 700 to 1,200 bu. per hour. Price \$500.
1 20 h. p. R. & V. Portable Comb. kerosene and gasoline, Volume Governor, water cooled, special clutch pulley. Price \$1,160.
1 Marselles 6 hole Spring Sheller, used one season, in good condition. Price \$285.
1 12 h. p. Portable International Gasoline Engine, in good condition. Price \$250.
1 32-ft. Sandwich Portable Corn Elevator, and 4 h. p. Staver Gasoline engines. Price \$300.
1 Brown-Duvel Moisture Tester, 2 compts, full supply extras. Price \$45.
1 8 h. p. Stationary Lenox gasoline engine. Price \$100.
KING-READ LUMBER CO., Montezuma, Iowa.

Edward P. McKenna

John A. Rodgers

McKENNA & RODGERS COMMISSION MERCHANTS

Grain and Provisions, Shippers of Corn and Oats

61 Board of Trade, CHICAGO

Consignments given
Special Attention

Phone
Harrison 7228

Orders in Futures
carefully executed

10

VITAL ISSUES

We invite requests for the 10 issues of the Wagner Twice Monthly letter that cover the April to August crop raising season. Ten issues sent on request. Will contain crop reports from 700 correspondents and understandable statistics bearing on future market changes. Send names of your friends.

E. W. WAGNER & CO., Board of Trade
CHICAGO
ESTABLISHED 4 CENTURY

Miscellaneous Notices

[Copy for notices under this head should reach us by the 12th of the month to insure insertion in the issue for that month.]

FOR SALE

Shinn Rods stand for the best in lightning protection. Write me. W. C. SHINN LIGHTNING ROD FACTORY, Lincoln, Neb.

GREAT BARGAIN

In used white pine lumber from Elevator B at Milwaukee, suitable for cribbing or building, 2x6, 2x10 and 12x12 from \$10 to \$20 per thousand f. o. b. cars Milwaukee. H. SCHMITT & SON, Jackson St., Milwaukee, Wis.

KEROSENE FOR AUTOMOBILES AND TRACTORS

New Model B, uses successfully 2/3 kerosene or distillate mixed with 1/3 gasoline. Satisfaction guaranteed or money refunded. Greatly increased power, very slow speed when desired. Special agents' prices. AIR-FRICTION CARBURETOR COMPANY, Department "A," Dayton, Ohio.

SPECIAL BARGAINS IN LUMBER

Two million feet of oak and white pine elevator cribbing, timbers and flooring from Rock Island Elevator now being wrecked at 13th street and Chicago River, Chicago. Also 5,000 doors and windows. Special prices on car load lots. RUEL WRECKING CO., 7337 Stony Island Ave., Chicago, Ill. Phone Hyde Park 1659.

HELP WANTED

SALESMAN WANTED

One of the leading Southwestern supply houses desires salesman familiar with grain elevator machinery equipment, flour mill supplies, power transmission machinery, gas and steam engines, boilers, pumps, machinists' and general factory supplies. Territory Southeastern Kansas and vicinity. State age, experience and salary wanted. SOUTHWESTERN, Box 8, care "American Elevator and Grain Trade," Chicago, Ill.

BAGS

WANTED

Second-hand bags and burlap. We pay highest cash prices. FULTON BAG & COTTON MILLS, Dept. D., St. Louis, Mo.; New York, N. Y.; Dallas, Tex.; Atlanta, Ga.; New Orleans, La. Write to the house nearest you for prices.

FOR SALE—BURLAP BAGS OF EVERY KIND

New or second-hand, plain or printed with your brand; seamless cotton grain bags; sample bags; burlap, cotton, sheeting, or paper for car lining, etc.

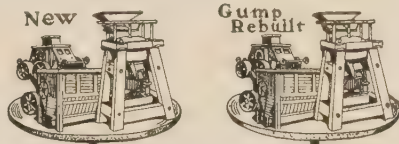
Wanted: Second-hand bags; best prices paid. WILLIAM ROSS & CO., 409 N. Peoria St., Chicago, Ill.

Grain and Seeds

FLOUR AND MILL FEEDS

Mixed cars of flour and mill feeds in 100-pound sacks are our specialties. Would like to send you a trial order to convince you of the superiority of our products. ANSTED & BURK CO., Springfield, Ohio.

What's the Difference?



Equally Efficient



GUMP'S BARGAIN LIST OF REBUILT SECOND-HAND MACHINERY
The Largest Stock of Rebuilt Flour Mill Machinery in the World.

PARTIAL LIST.

DOUBLE ROLLER MILLS.

Two Dble. 10x42 Allis Mills, almost new.
Two Dble. 10x36 "Gray Wolf" Mills
ALLIS—Eleven 9x30; Eleven 9x24;
Seventeen 9x18; Four 9x14; Three 9x11;
One 6x12.



NORDYKE & MARMON
Three 7x14; Two 6x16; Five 6x12.

SINGLE MILLS.

9x18 Allis; 9x24 Stevens; 9x18 Odell;
10x24, 12x24 and 12x30 Downton; 6x18

Case; 6x20 Willford.

ROLLER FEED MILLS.

9x30 Wolf; 9x24 Nordyke & Marmon; 9x24 Acme;
9x24 Dawson; 9x18 Dawson; all three pair high.

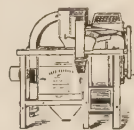
9x18 Allis; 9x30 Wolf; 9x18 Barnard and Leas, two pair high.

No. 0, No. 1 and No. 2 Willford; 6x12 and 6x15 Monitor Three-Roller Mills.

SIFTERS.—Two No. 0 B, One No. 2 B and One No. 3 B Planifiers; One No. 1, One No. 2 and One No. 4 Planifier Scalpers; One 3x60, Two 5x60 and One 6x60 Swingsifters; One No. 64 Universal Bolter.

BUHR STONES.—All sizes from 30 to 54-in. diameter, inclusive.

BUHR-STONE MILLS.—18-inch Planter's Pride; 16-inch, 20-inch and 24-inch Monarch; 24-inch Kaestner; 24-inch Triumph; 30-inch Harrison; 30-inch Kaestner; all vertical; 14-inch Obenchain; 20-inch Nordyke; 30-inch Munson, Bradford and Richmond and Queen of the South; 36-inch Bradford and Nordyke & Marmon, all under-runner mills. Four 48-inch Iron Frame Emery Hulling Stone Mills.



SCOURERS.

Eureka.—One No. 00; One No. 1;
One No. 18; Four No. 1½; Two No. 4.

Monitor.—Two No. 1; One No. 4; One No. 6.

Cranson.—Two No. 2; One No. 4; One No. 4½; One No. 5 and One No. 6.

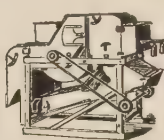
Richmond.—Two No. 1; Two No. 3.
One No. 2 Invincible; One No. 3 Iron Prince.

CENTRIFUGAL REELS.

LITTLE WONDER.—One 7'x12"; Four 8'x14".

G. T. SMITH.—Three No. 1.
One No. 2 and One No. 4.

ALLIS.—One No. 00, Two No. 2;
One No. 4, Three No. 1 and Two No. 3, Allfree; Two No. 1 and Two No. 2 Gorton.



SEPARATORS.

MILLING.—One No. 1, One No. 4 and One No. 4½ Barnard's; One No. 177 New Barnard's Double Side-Shake for Winter Wheat; One No. 3 and One No. 198 Eureka; One No. 4 Monitor.

WAREHOUSE.—One No. 3 Monitor Warehouse; Two No. 4 Monitor Receiving; One No. 3 and Two No. 8 Eureka Elevator; No. 34 Barnard & Leas, Receiving.

EVERYTHING FOR FLOUR AND FEED MILLS

Address Dept. 63 for "GUMP BARGAIN BOOK," No. 5, which gives a complete list of machinery on hand, with net price on each one.

Agents for: Dufour Silk Cloth, Russell Cotton Belt, Tyler Wire Cloth.

Roll Corrugating and Grinding a specialty.

PIONEERS IN THE REBUILDING OF FLOUR MILL MACHINERY

Established in the year of 1872



SEEDS WANTED

We solicit correspondence from shippers or dealers who are in position to offer us, or can secure for us, Timothy, Red, Alsike or Alfalfa, Clover, Millet, Red Top or other Field Seeds. Write us, with crop news, samples, and other information as to production of seed and approximate values in your section. Please refer to this advertisement.

ILLINOIS SEED CO.

1521-1535 Johnson St.

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Workmen's Compensation or Employer Liability Insurance

Protects you from

liability imposed upon you by the Illinois Workmen's Compensation Law. Write for rates and information.

BALSLEY BROS.

GENERAL INSURANCE AGENCY,
SPRINGFIELD, ILLINOIS

ROOFING AND SIDING

THE SYKES COMPANY

930 West 19th Place, Chicago

MAKERS OF

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WE manufacture all gauges of corrugated iron, either painted or galvanized. We make Patent Cap Roofing, Roll Cap Roofing, "V" Crimped Roofing, Metal Ceilings, etc., etc.

We make a specialty of

Corrugated Iron and
Metal Roofing
For Grain Elevators

And take contracts either for material alone or job completed.
Write us for prices. We can save you money.

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THRESHER-FULLER GRAIN CO.

Grain Commission Merchants

CONSIGNMENTS SOLICITED

Grain Bought and Sold for Future Delivery

311-14 Board of Trade KANSAS CITY, Mo.

INDIANAPOLIS

The Mutual Grain Company

GRAIN COMMISSION

618 Board of Trade, INDIANAPOLIS, IND.

Careful attention to all shipments

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Try

C. A. KING & CO.

Toledo Leads World

"SEND IT TO ZAHM"

THAT Consignment of Wheat, Oats, Corn or Seed.
THAT Order for Futures—Toledo or Chicago.
TOLEDO is the real market for Red Clover,
Alsike and Timothy futures.

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ASK FOR OUR DAILY RED LETTER—FREE

JOHN WICKENHISER & CO.

Wholesale Grain Dealers

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We make track bids and quote delivered prices.
Solicit consignments of Grain and Clover Seed.
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Board of Trade

The Oats Specialists

H. D. RADDATZ & CO.
GRAIN, SEEDS AND FUTURESAlways in the market to buy or sell. Ask for
our prices.Room 21, Produce Exchange
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WE BID for wheat each day in
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market letter in the Toledo Daily
Market Report. Yours for the asking.

Southworth & Company
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Oats Are Our Specialty

The Paddock Hodge Co.

Receivers—TOLEDO—Shippers

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Wheat, Corn, Oats, Seeds

OUR unexcelled service is the result of twenty-six years experience in the grain business in this market. SEND us your consignments and orders in futures.

PRODUCE EXCHANGE, Toledo, Ohio
Members Toledo-Chicago Exchanges.

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RECEIVERS AND SHIPPERSSolicit Your Consignments—Also Orders in Futures
Specialty: No. 2 Milling Wheat

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Hay Man"

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HAY—Ear Corn, Oats—HAY

IN THE ONE SPOT 45 YEARS

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Leading Hay and Grain Dealers

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RYE A SPECIALTYOffice 1019 Liberty Street Pittsburg, Pa.
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Grain, Hay, Straw and Mill Feed

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CRAWFORDSVILLE, Ind.

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Car Lot BUYERS of GRAIN

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That country trade always pays you
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See the point?

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The permanent success of our business depends on
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We are Specialists in these grains and
are strictly Commission Merchants.**BROOKLYN HAY & GRAIN CO.**
HAY, STRAW AND GRAIN
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Receivers and Shippers of

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GRAIN MERCHANTSWith enlarged facilities for handling all kinds of
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Commercial German National Bank, Peoria, Ill.**W. W. Dewey & Sons**
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Merchants and ShippersGet best possible results by careful and personal attention
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Picker & Beardsley Com. Co.

118 NORTH MAIN STREET.

Ship Your Grain, Hay and Seed to

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We never buy. Handle on consignment only.

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K. C., Mo., Office, 101-102 Board of Trade**Toberman, Mackey & Company**

Fastest Growing Commission House in America.

Can handle your Consignments in St. Louis and Kansas City.

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7, 9 and 11 South Main St. SAINT LOUIS

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Commission Merchants
 GRAIN, SEEDS AND PROVISIONS
 72 Board of Trade CHICAGO

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 SO HAVE WE
CONSIGNMENTS
 THAT'S ALL TRY US
M. L. VEON & CO.
 762 INSURANCE EXCHANGE BUILDING, CHICAGO



SEEDS **THE ALBERT DICKINSON CO.**
 DEALERS IN
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 PEAS, POPCORN, BIRD SEEDS, BUCKWHEAT, BAGS, ETC
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PHILIP H. SCHIFFLIN & CO.
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 Consignments of all kinds of Grain and Field
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 R. W. CARDER, Sec. and Treas.
W. A. FRASER CO.
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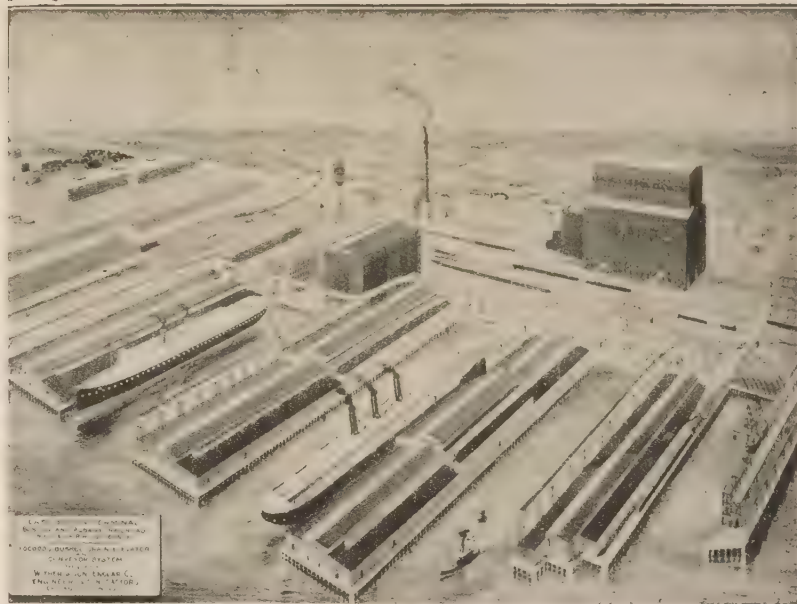


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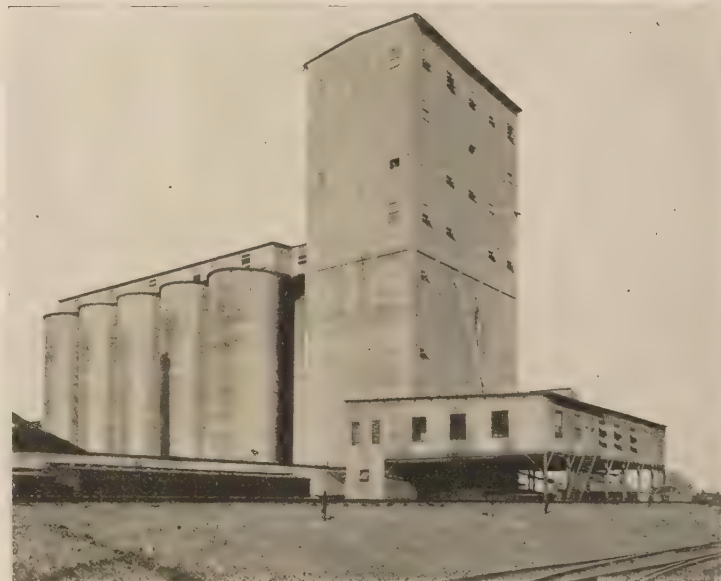
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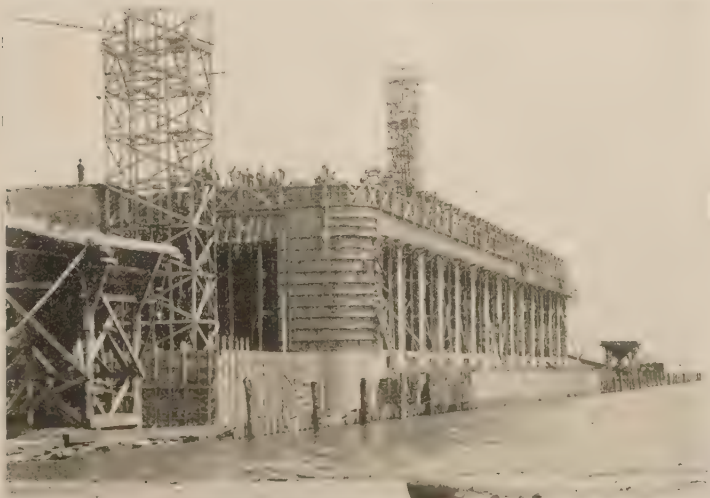
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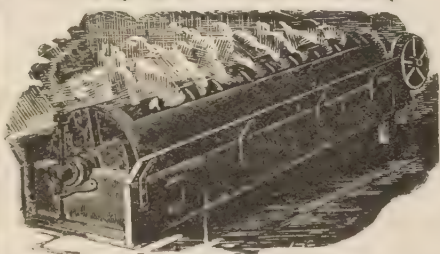
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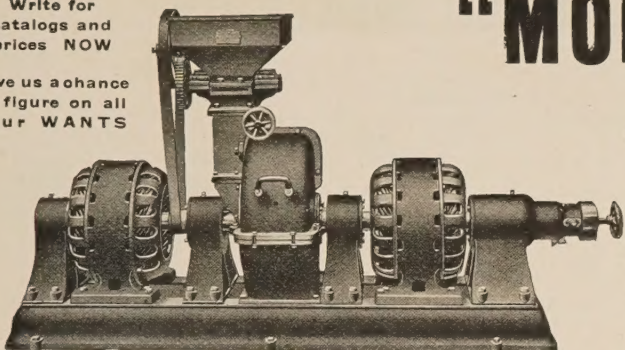
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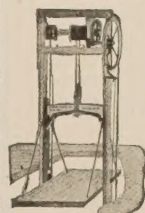
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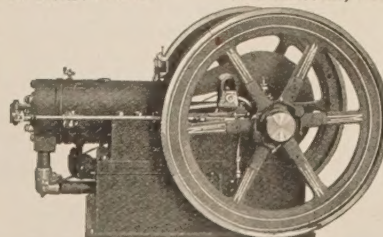
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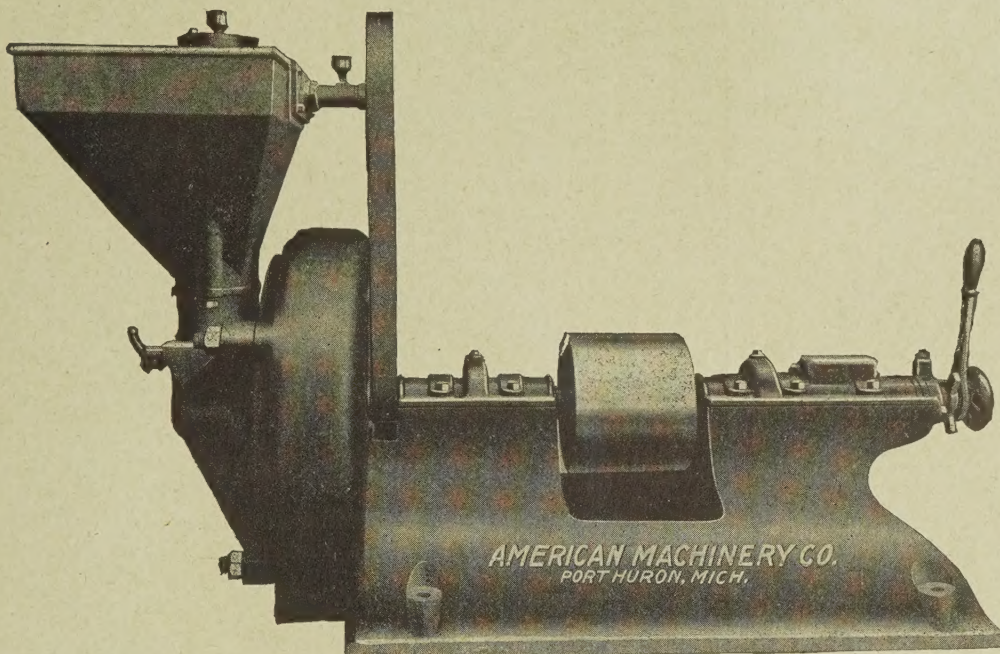
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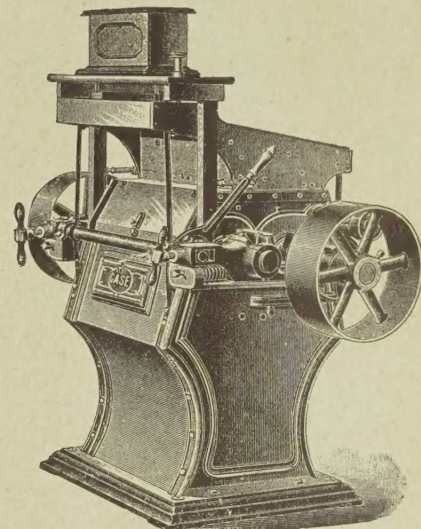
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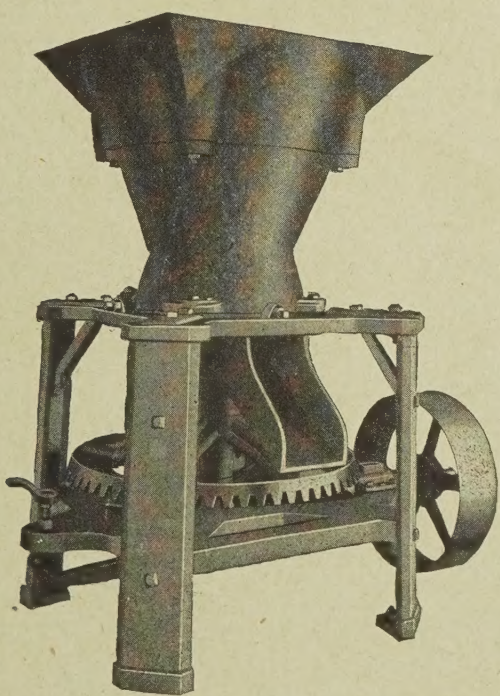


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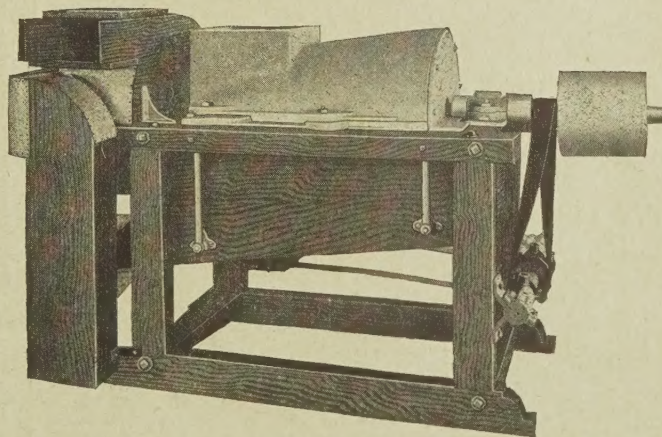


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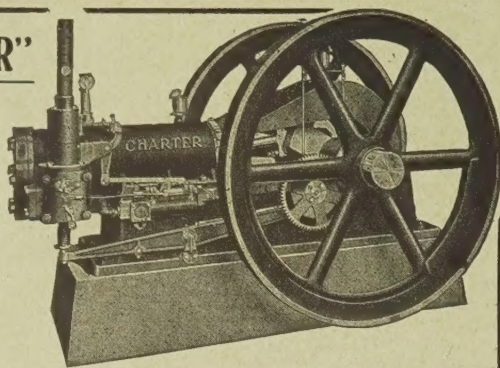
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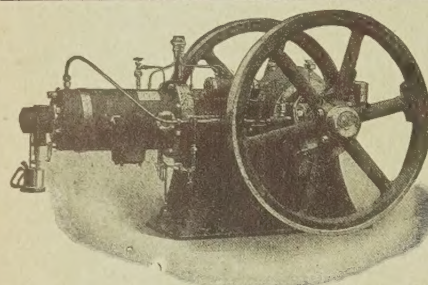
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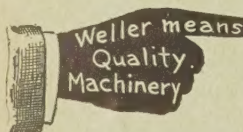
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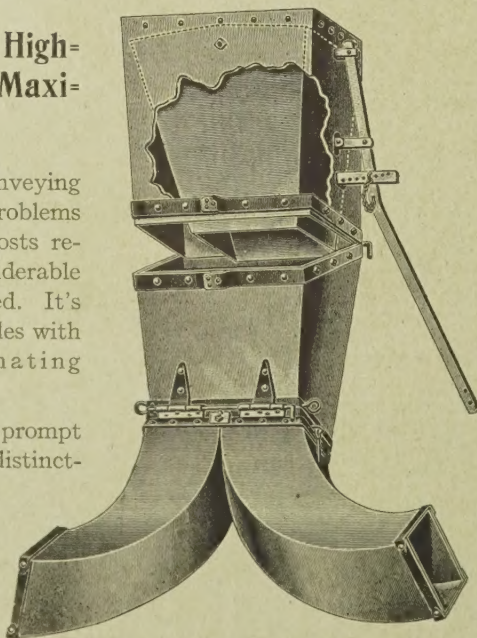
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